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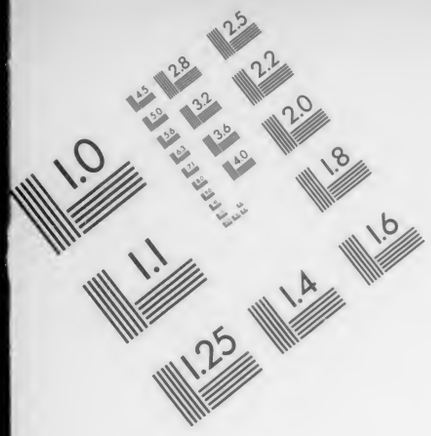

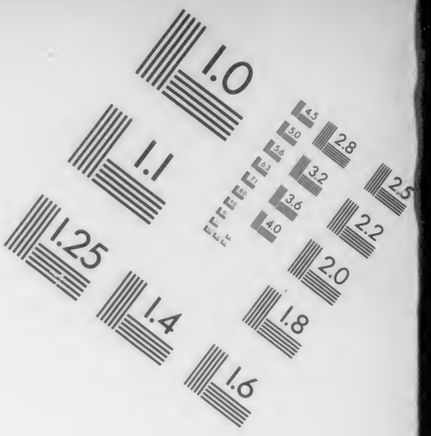

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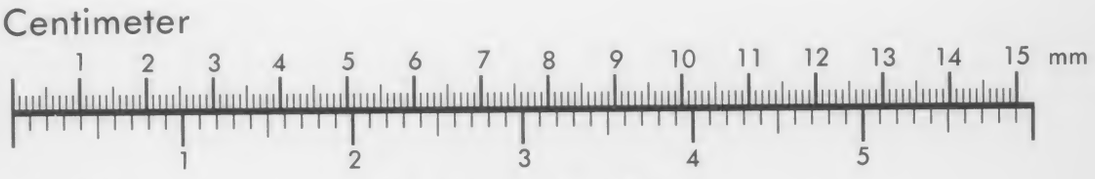

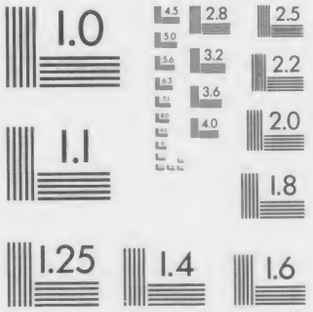

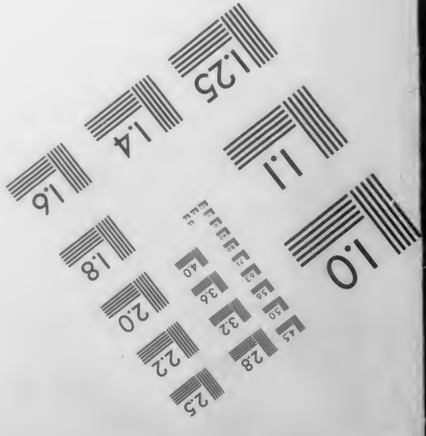

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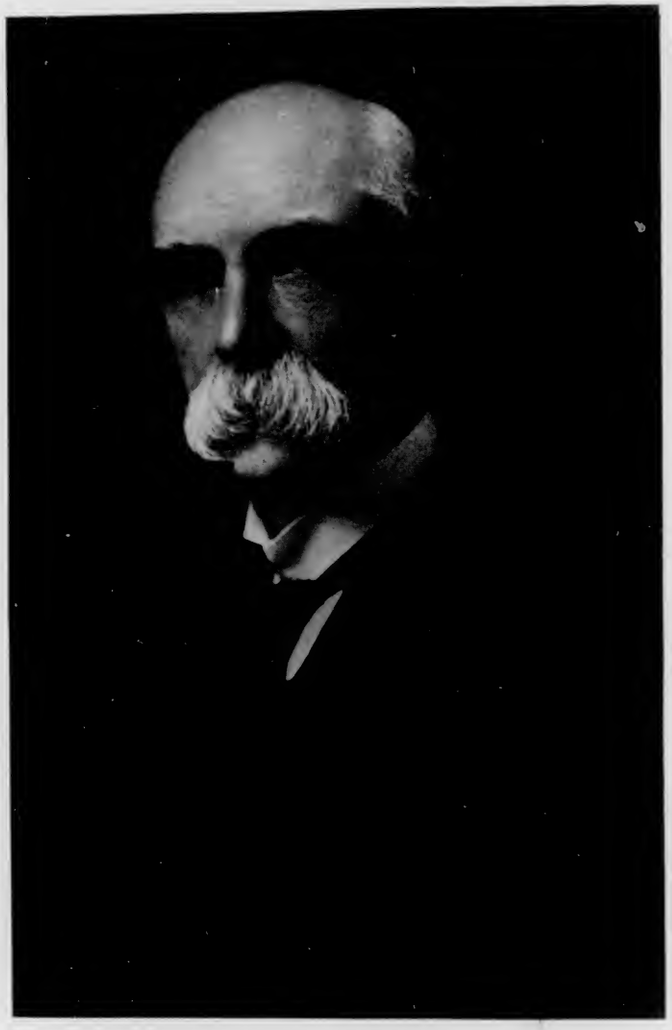

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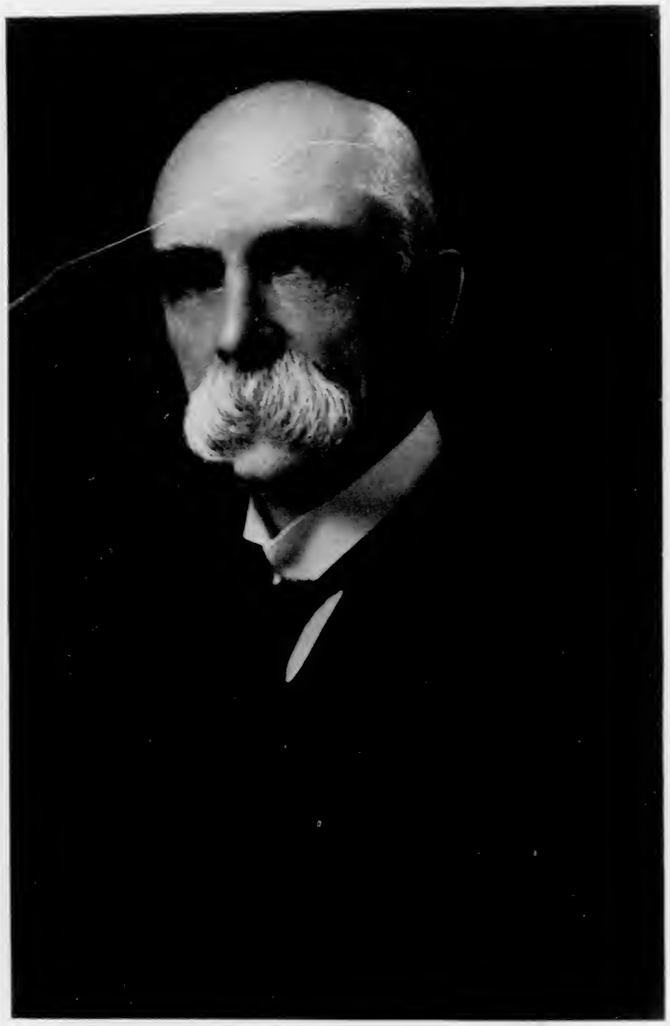

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THESE ESSAYS ARE
AFFECTIONATELY DEDICATED TO
GEORGE HERBERT PALMER
THE FRIEND AND TEACHER
OF SO MANY AMERICAN PHILOSOPHERS

PREFACE

PLANS for bringing out one or two volumes of *Contemporary American Philosophy* were suggested and definitely set in motion shortly after the publication, in 1924, of the first volume of *Contemporary British Philosophy*. The project was entrusted to a committee of the American Philosophical Association, made up of three Divisional Committees, of the Eastern, Western, and Pacific Divisions of the Association, whose chairmen were to act as the American Editors of the volumes.

The contributors to the volumes were selected on the basis of a referendum vote of the membership of the three Divisions of the American Philosophical Association. The Editors regret that either through the more or less accidental omissions in this hastily taken referendum or through sudden illness, as in the case of Professor Addison Moore, a number of colleagues whose essays would have been greatly valued are not here represented. Each contributor was requested to state his principal philosophic beliefs, the reasons supporting them, and the manner in which he had reached them. It is hoped that the publication of these philosophic autobiographies will serve the purpose of clarifying the minds of the writers, and of helping their students to a better understanding of their various specific doctrines. An explicit confession of the temperamental sympathies and prejudices of a philosopher, and of such of his life's circumstances as seem to him to have been relevant in shaping his conclusions, may possess as much philosophic value both to the writer and to his readers as the conclusions to which they contribute. And the honest attempt to psycho-analyse one's mind may and should result in a wholesomely humiliating realization of the extent to which one's own beliefs (and not merely those of one's neighbours) are determined by subjective causes rather than by objective reasons.

These considerations are offered by the Editors in defence of a book which might appear at first sight as an inappropriately egotistic collection of studies. The degree to which the defence is an adequate one, and the extent to which American teachers

of Philosophy are severally justified in confessing their faiths, must of course be left for the readers of the volumes to decide.

After the Committee had become organized and had its plans well under way, it suffered a severe loss in the death of Professor Alfred H. Lloyd, of the University of Michigan, Chairman of the Committee of the Western Division. His colleagues take this occasion to record their appreciation of the great interest in the plans for these volumes which Professor Lloyd manifested, and their profound regret that he did not live to see their fruition.

It is doubtful whether these volumes would have appeared had it not been for the constant encouragement and help which the American Editors have received from the Editor of the British volumes and of the Library of Philosophy, Professor John H. Muirhead, and they cannot refrain from expressing, on behalf of all the contributors, their appreciation of Professor Muirhead's generous aid and unflagging interest.

GEORGE P. ADAMS
WM. PEPPERELL MONTAGUE

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THE American Philosophy Association dedicates its new volume of discussions to me and asks me to write the introductory paper. I am somewhat puzzled by the honour. It cannot be due to any signal contribution on my part to philosophical doctrine, such as has been made by several of my colleagues, by James, Royce, Münsterberg, Santayana, Perry, McDougall. My name is connected with none of the many fighting faiths which have enriched American thought during the eighty-seven years of my life. There is no distinctively Palmerian philosophy. But I have viewed the whole marvellous expansion of thought which has gone on from the restricted outlook of Hopkins, Porter, Bowen, and McCosh to the wide horizons of Dewey, Montague, Hocking, and Whitehead.

What, then, is the mental condition of one who has seen it all, seen it too instructed by a pretty wide acquaintance with the general history of philosophy? This may well be the question I am asked to answer. Of argumentation over single problems enough will be offered by other contributors to these volumes. They are still in the field of conflict. Something more personal I can supply. By making my paper largely biographic I can treat myself as a kind of representative of the philosophic young men of my time. I can tell of the haphazards, discouragements, helps, and changes of public opinion through which they have forced their way from the stagnation of early thought into the tumultuous activity of the present time, and beyond this into individual careers and positive personal beliefs. Of course each of us is unique. No man is completely typical. Yet there are sufficient resemblances among the buffetings which we all have had to encounter to make a single candid story of them interesting and instructive. The plot of the story may fit us all, even if the incidents vary. So I shall try to set down here an old man's memories of the struggles through which he has passed in reaching the criticized convictions about ultimate things on which he now relies.

GEORGE HERBERT PALMER

INTRODUCTION

By PROFESSOR GEORGE HERBERT PALMER

Born Boston, Mass., 1842; Emeritus Professor of Philosophy, Harvard University.

INTRODUCTION

PART I

I

FAIRLY to follow the growth of a mind, one must begin by inspecting the soil wherefrom its roots drew nourishment. From what heritage did I set out? I am of English stock. My father's ancestor came over in 1636 and settled at Little Compton, Rhode Island. A few years later, John Peabody, the ancestor of my mother, settled at Boxford, Massachusetts, and on his farm I am of the seventh generation. Half of each year of my youth I lived in the country, the other half in Boston, where on March 19, 1842, I was born. In the same house with me were born my seven brothers and sisters. My father, a business man, was of modest means, so that we early learned the careful use of money. No waste was allowed, and we understood that there would be little property to be divided after the death of our parents. But expenditures for education, books, music, travel, charity, and the dignified furnishing of the home were lavish. After attendance at the Boston public schools, all four boys went to Phillips Academy, Andover, two subsequently to Harvard College. Two by their own choice entered business. Self-reliance was secured by my father's principle that every healthy child who had been well brought up should be turned out of the home at twelve. That was my age when I entered Andover. Studious opportunities for girls were scanty then. But from the best there were each of my sisters took what suited her disposition.

Two strong philosophic influences dominated my childhood, one personal, one institutional. To-day it is fashionable to decry authority in education and allow the child to form its own beliefs. But where shall he get material to form them of? In reality we do not enter the world so poor. Each of us starts with what I may call an intellectual bank-stock, consisting of the conclusions those preceding us have reached in regard to the best modes of living. Knives and forks, three meals a day, electricity, the state, the family, are notions we were not left to invent, but to adopt and criticize.

An uncle of mine, a professor of Latin in Amherst College, had loved the old English poet, George Herbert, and suggested to my mother to give me his name, "so that I might always have a friend." A rich endowment indeed! For though Herbert's range is limited, he is an exquisite lyric artist who spent the few years of his ardent and hesitating life in perplexity over the counter attractions of the one

and the many, God and the world. In him religious aspiration is peculiarly fresh and genuine. No less so are the allurements of sex, station, sweet sounds, rich clothes, fine phrases, high society. He always remains a double-minded man, at his death entrusting the manuscript of his poems to his friend as "a picture of the conflicts of my soul with God." What a stimulus to reflection would a thoughtful boy find in such a volume!

But the philosophic influence which was supreme over my youth, and has left its honoured mark on my age, was Puritanism. My father was a deacon in an Orthodox Church. Four uncles were Orthodox ministers. Religion of that positive type entered into every hour of my happy home. In a former paper I have set forth the facts and features of the Puritan home, and shown how far from true are the current caricatures of it. While profoundly serious—more romantically serious than many natures could well bear—there was nothing morose or sour about it. If its people had such traits independently, these no doubt appeared peculiarly unlovely in a religious setting. But for stout and cheerful souls it was an ennobling faith, providing abundant room for the play of all that is worthy in human character.

According to it man and God are not separable. A complete man, such as once appeared, would be a revelation of God himself. There are, however, lower and higher sides in our nature, the former expressing our adaptation to the physical and temporary world we inhabit. These, therefore, require continual subordination to the rational order. Indeed, the exercise of this subordination—not suppression—is a precious opportunity for that self-discipline which is the very purpose of our existence. We are born only half made, and must not take any casual impulse as if it rightly belonged to us. Pick and choose. Life is designed as a training school where each orderly advance makes another more possible. So life here prepares for life hereafter, and in that new life there will be nothing arbitrary. Its woe or happiness is the unobstructed expression of what we have come to value. I have sometimes thought that the deepest thing in Puritanism was its insistence on orderly connection. Or was that deepest thing the immediacy of the divine presence? The Puritan stood face to face with God, and owned responsibility to no one else. No Church or State could bind him. In his conscience and his Bible—and between the two he felt no divergence—he heard the authentic voice of God.

There are plenty of loose joints in such a creed, especially in its extreme individualism and lack of a community sense. But all will acknowledge that it provides an incomparable body of material for a youthful philosopher to wrestle with. In Germany, under the name of Pietism, it started the career of Kant. And nobody can

understand the early history of America without perceiving that the Puritanism of New England furnishes its backbone.

Such was the rich intellectual "bank-stock" I set out with. But the physical stock was discouragingly poor. I was born a weakling, not expected to live from year to year. Spinal and heart trouble were in the family on my mother's side; on my father's constipation, rupture, and the attendant disturbances. My whole nervous system was over-sensitive and easily upset. Hardly one of my early years went by without a long illness. There may have been disorder in the brain, for up to about my fortieth year headaches were almost continuous, and I have never slept a night through in my life. I have undergone six surgical operations, the last when I was eighty-three. It is hardly necessary to add that I was a shy boy, avoiding people and finding writing and speaking extremely difficult. I do not complain of these conditions. Most of us break down at some time. He is fortunate to whom ill-health comes early and who thus learns betimes how to take care of himself. Since the nervous collapse that sent me home from Germany in 1869, I have been building up a body capable of meeting strains undisturbed. And that is the test of health.

Going to Andover at twelve to prepare for college, I was stopped two years later by granulation of the eyelids. Hard little particles nearly as large as peas formed on the under surface and nearly closed the lids. I was obliged to give up study and be put in charge of a surgical oculist. After six months' treatment he advised an entire change of climate, if possible a sea voyage. On a barque of five hundred tons I, at fifteen, with a brother two years older as companion, sailed for Egypt. There we spent a month in a country as yet hardly affected by Western civilization. It was a memorable experience for a youngster, but produced no improvement in the eyes. All thought of education had to be abandoned, and I took a place in a wholesale dry goods store.

After rather more than a year a friend took me to a physician in general practice, who thought my trouble might not be merely local but due to a generally bad condition of the system. With no instruments or lotions, but using simple homeopathic medicine, he brought the lids in the course of a few months to entire smoothness. To let the eyes grow strong they should have had an entire year's rest. But the prospect of entering Harvard was too inviting. I found that by exercising in the open air for most of the day I could study for an hour or two. As my doctor did not absolutely forbid the plan, I took a tutor and crawled into Harvard in 1860 with six conditions, but with feeble eyesight for the rest of my life. From service in the Civil War I was rejected on account of my eyes.

II

Harvard education reached its lowest point during my college course. When I entered it it was a small local institution with 996 students in all its departments and thirty teachers in the college Faculty. C. C. Felton was its President. Nearly all its studies were prescribed, and these were chiefly Greek, Latin, and Mathematics. There was one course in Modern History, one in Philosophy, a half course in Economics. There was no English Literature, but in the Sophomore year three hours a week were required in Anglo-Saxon. A feeble course or two in Modern Languages was allowed to those who wished it. There were two or three courses in Natural Science, taught without laboratory work. All courses were taught from text-books and by recitations. Though lectures were announced in several subjects, among them English Literature, not more than half a dozen of these were given in a year. Professor Cooke, it is true, lectured to the Sophomores an hour each week on Chemistry. But though we were all required to attend, there was no examination. All teaching was of a low order. The personality of only two teachers impressed me—Torrey in History, Gurney in Latin, perhaps I should add Sophocles in Greek, through his picturesque remoteness.

Such a curriculum—and it was no worse than in other colleges—would seem to have been arranged by a lunatic and to be valuable only as preparing the way for an Eliot. But that would be a mistaken judgment. While students found little to attract them in the official programme, they had four free years to devote to sports, society, discussion, friendships, and the pursuit of individual tastes. There was enormous waste, of course. But any of us who cared for intellectual things enjoyed an elective system of our own. I, up to the limit of my eyesight, read Poetry, Philosophy, and History, committing great quantities of Poetry to memory at times when I could not read. Tennyson was my master. All his changes from edition to edition I copied into a pocket volume, and was fairly introduced by him to Poetry as a Fine Art. Art for me became henceforth a close ally of Philosophy and Religion.

What I most wanted from Harvard was systematic training in Philosophy. But Professor Bowen offered only a single course, and that more elementary than any of the more than thirty now on the Harvard list. A slender acquaintance with the Scotch School—Reid, Stewart, Hamilton—was something. Something came from a source peculiarly barren—Lewes's *Biographical History of Philosophy*. It is an ignorant book, written to prove that there is no such thing as Philosophy. But the style is pleasing, and the exhibit of an age-long struggle by man to comprehend himself, his world, and his maker

was what I needed at that particular moment. It was my first encounter with historic thought.

In striking contrast with this pretender a genuine man appeared and made an epoch in my intellectual life, John Stuart Mill. His book on *Liberty* was published the year before I entered college, his *Utilitarianism* in my Junior year. Through these I experienced for the first time the luxury of loyalty, of feeling myself a follower and propagandist. In the *Utilitarianism* I had gained a moral creed, and I made my Commencement part a defence of it. Everything that Mill wrote I read eagerly. And though before long I came to see that the best parts of Mill were his inconsistencies, these in no way lessened my admiration. They rather increased it as signs of his candour and freedom from partisanship. Here was a beautiful soul, somewhat too modest and inclined to lean—on his father, on Bentham, on Mrs. Taylor, on Miss Taylor—and showing in his face the tragedy produced by the conflict between the new idealism of Coleridge and Wordsworth and the traditional empiricism in which he grew up. While Mill's philosophy provided me no resting-place, I have never ceased to think gratefully of the man. On my first visit to England I went to the House of Commons and found my hero not the calm listener I had imagined, but restless in his seat and continually ejaculating the strange "Hear, Hear!" with which members approve what is said. In the early nineties Mrs. Palmer and I made a pilgrimage to Avignon to see the house where Mill spent his last years in sight of his wife's grave.

Herbert Spencer never affected me in any such way. His technical knowledge of Philosophy was slight and his personality inferior. Nor was I much moved by the bitter Darwinian controversy. Darwin himself was admirably restrained, but his defenders and assailants were alike blunderers when they assumed that religion was at stake over the question whether creation was accomplished at once or by successive stages. On the whole, I thought those wisest who did not count evolution an affair of chance. These three men—Mill, Spencer, and Darwin—were the chief agents in breaking up American stupor and starting fruitful philosophic discussion.

III

On leaving college I felt I had absorbed more than I had digested, and I resolved to take a year of comparative leisure for reviewing and rethinking what I had read. Accordingly I accepted a position as sub-master in the Salem High School. I was to teach half a dozen elementary subjects with which I was entirely familiar. But I never

worked harder in my life. To be acquainted with a subject sufficiently for one's own purposes is not the same thing as the mastery needed for impartation. The entire year was devoted to the study of teaching.

Already I had made a beginning in this finest of the Fine Arts. During the winter vacation of my Freshman year I took the place of an absent teacher in the State Reform School. I waked my boys in the morning, presided over their three meals, had them as pupils during the forenoon, for two hours in the evening sat with them in their games, talks, and readings, and put them to bed at 9.30. I found them attachable and interesting. Few had known anything like a home or had learned to love anybody. Being somewhat cleverer than the average and more adventurous, they had committed some petty crime and were arrested. Most of them afterwards served in the war. During the later years of my college course I gave two evenings a week to Boston Mission Schools, where all ages, all nationalities, all colours, and both sexes gathered to be taught reading, writing, and other beginnings of wisdom.

The boys and girls of Salem were of different stuff. They came of a cultivated inheritance and a preliminary training, and were less afraid of their bashful instructor than he of them. I can feel again the sinking of heart as the closing door shut me into my recitation room with half a dozen pupils from whom I could not escape for an hour. Precious sufferings these. By them a self-centred youth becomes gradually transformed into a public-minded man. Another profitable hardship the school gave: it initiated me into tact. The two Principals, man and woman, were powerful characters but markedly divergent in temperament. I admired both and learned as much from one as from the other. But they soon declared war and throughout the year were hardly on speaking terms with one another. We all three lived in the same house, sat at the same table, and each required to be treated with considerate care.

These two abilities—the ability to face an intelligent class unabashed and the ability to meet differently constituted people with kindly tact—were begun in me at Salem School. Each was evidently essential for a teacher of philosophy; yet to make a beginning on them obliged me temporarily to suspend all philosophic work. To devote myself now exclusively to this central interest became my urgent aim.

IV

In most colleges the little philosophy attempted was usually taught by the President, a minister. If an independent teacher was also employed, he was a minister. Under Puritanism theology and

philosophy were pretty closely identified. Before the days of Johns Hopkins, too, the best opportunity for continuous study of philosophy was in a Divinity School. I accordingly entered Andover Seminary in September 1865. Among the hundred students I met there I gained some lifelong friends, chief among them W. J. Tucker, afterwards President of Dartmouth, and J. H. Lee, an Amherst graduate who had just returned from the war with tastes similar to mine.

With Lee I formed a studious alliance. We read philosophy three hours a day, at first in its history, then in the English and Scotch writers, later in Kant. By the end of our second year both he and I felt the need of a broader outlook, especially clearer insight into German Idealism. A glimpse of this we had already gained through the writings of Coleridge and F. D. Maurice. Of course a first reading of Kant had bewildered more than enlightened us. We longed for a German university. One morning Lee returned from a week-end at home with the announcement that his father had told him to spend next year abroad. When this was reported in my home my brother-in-law offered to send me also. I hesitated, knowing that he was far from rich. But as we all saw that it would be a turning-point in my life and would make me of public value, I finally accepted the great gift—a gift the more generous since none of my family shared my philosophic interests. I hoped, too, that the brain trouble that had been growing more oppressive might be helped by a change of climate.

As neither Lee nor I knew any language but our own, we planned to sail in May 1867, and spend the intervening months before the universities opened in getting up our German in a family in Stuttgart to whom we had introductions. We would then divide our year between Leipzig and Berlin. The voyage and journey were exhilarating. European travel was less common then than now. To us Europe had always been a fairy tale, and here it was proved real. We ran rapidly over Ireland, England, Holland, and the Rhineland, mostly on foot and in daily wonderment, until we settled in comfortable quarters in picturesque Stuttgart and began our attack on German. As no other language was spoken in the house our progress was rapid. In July we heard of Tübingen as one of the quaint spots of Germany, hardly changed since the Middle Age, and we walked across the hills to see it. Both of us were completely fascinated. We decided to move there at once and to spend our first semester there.

There for two years I was enrolled as a student, with great profit and enjoyment from the lectures of Professor Sigwart and Professor Herzog and from the intimate personal acquaintance which these

gentlemen allowed me. But on the whole my foreign stay was a period of catastrophe and disappointment.

During the summer my brother and sister, who had sent me abroad, crossed the ocean on business and urged me to join them in their Paris apartment. Some happy weeks were spent with them, with the Louvre pictures and with the bookstalls along the Quai. But one Saturday a telegram from Sheffield, England, called me instantly to the death-bed of a friend. It was a stormy night and the Channel boats were crowded. The crossing usually required two or three hours; that night it took nine. I have never known so wild a sea. The waves swept the decks, the hatches broke loose, and everybody was drenched. We landed in the morning with clothes wet through, and before they could be dried all passengers were called to the waiting train and the long railroad ride. My head was in a bewildered state. I managed to return from England the next day, but as soon as I entered the Paris apartment I fell on the floor unconscious, and for six weeks thereafter had my wits only at intervals. The illness was pronounced typhus fever in the brain. Possibly enough, something of the sort might have occurred if I had not been so badly exposed. The brain had long been weak, the German food was abominable, hygiene and drainage had there no existence.

But the upsetting was not without its compensations. For physician it gave me Mme. Hahnemann, the second wife of the discoverer of homeopathy, a stately lady past seventy, in full vigour of body and mind, to whom I became warmly attached. Then as I grew able to move about a little I visited the magnificent Exposition of 1867, where Japan for the first time startled Europe with its unique art. In the Louvre and several of the other galleries I studied often, for art was now taking its permanent place in my mind as the supplement and concrete embodiment of philosophy. Evenings an eccentric man of genius, Edward Silsbee, read aloud to me. He was a devotee of Shelley. The Shelley manuscripts at Harvard and Oxford are his gift. I, a sworn Wordsworthian, could give him only a fragment of the admiration he desired. These were, therefore, gainful weeks. They brought everything except abstract Philosophy. To get this I was anxious to return to Tübingen at the earliest moment. My brother and sister were already in America. Though my doctor advised against haste, I set off as the bleak autumn was changing to winter. It was a bad blunder. I overestimated my strength. A relapse occurred, and I was forced back to Paris for another month.

By the time I was settled again in Tübingen half of my precious year was gone. Lee was to return to America in the spring, and my brain was so unsteady that I was warned not to strain it by severe study. I therefore visited still more frequently the homes of my

Professors, especially that of Sigwart, absorbing philosophy instead of studying it. Finally Herzog suggested my beginning a thesis for the Doctorate on the concept of Sin in the Agamemnon of Æschylus. At Harvard I had tasted the delights of Greek literature, and little as was my knowledge of Greek grammar, I had from time to time read several dramas with a friend. Now in broken health I turned to these enchantments as a refuge. Sometimes alone, sometimes with a like-minded companion, I read Homer through, much of Herodotus, all the surviving plays of Æschylus and Sophocles, half of those of Aristophanes, two or three of Euripides, for whom I never greatly cared. Half a dozen of the lighter dialogues of Plato kept philosophy alive, but into the magic world of the *Republic* I did not enter till much later, and I never got much from the *Laws* and the *Theætetus*.

It will be seen that my Greek studies were not serious. A lawless personal taste directed them no less than when I read Goethe, Heine, Keats, or Chaucer, to whom a friend had early introduced me. No doubt such eager amateurism yields something missed by the academic scholar. The two should go together. And in my work for the Ph.D. I more nearly united them.

But I have anticipated, and brought over into my first year much belonging to the opening of the second. For there was to be a second. When my father learned of my misfortunes he wrote and offered me another chance. So I spent the summer in a quiet German village where I could have good care and small expense. By the time the new semester opened I was much improved in health, able, indeed, to get real profit from philosophic lectures and from work on my thesis. I need not then recount the experiences of these months, but may skip to the Christmas holidays.

My brother and sister had again come abroad, this time themselves in search of health. They were spending the winter in Italy and invited me to join them in Rome for the holidays. An interesting time it was to be there. Pius Ninth's Œcumenical Council was in session, and Catholic leaders from all over the world filled the streets. Each Sunday I heard Cardinal Manning render Catholicism plausible to the many English Protestants then in Rome. He was an imposing figure and an admirable pleader, as good as Browning's Bishop Blougram. That old Rome ruled by the Pope was worth seeing. The masking for the Carnival was brilliant, the horse-race down the Corso unique, the services at St. Peter's vulgarly superb, and the Pope's blessing of the crowded Piazza majestic.

But Popes knew nothing of hygiene. The rotten streets of Rome bred a special type of malaria with Roman fever as its product. I was soon attacked. I fled to Florence in time to escape the full force of the fever, but the virus went off in a series of huge boils as prostra-

ting as the fever itself. More than a month passed before I was able to move about and study the frescoes and the lovely Tuscan sculpture. My excellent Italian doctor assured me that I could not expect to be myself again under a year. It was plain that I must abandon Germany, Sigwart, my thesis, and go home. At my little hotel in Florence I had found a dear friend and Harvard classmate, Frank Washburn, whose experiences abroad had been almost as disappointing as mine. He, too, was minded for America. Travelling together slowly, a pair of cripples, we reached Boston in early spring. Europe had given me little of what I came for, but it had been a great maturing time. A scholar is hardly grown up until he makes another language and another national outlook his own.

I hoped the quiet of a Boxford summer would put vigour enough into me to allow me a final year at Andover. I entered there in September 1869. But complete nervous collapse brought me back two months later to Boxford for the winter. And here let me say that I never became a minister nor applied for licence to preach. I saw that my business in life must be the critical analysis of thought, of moral and religious thought, and that any appeals I might wish to make to the emotions and wills of men must be subservient to this and depend for success on the literary power hard work would enable me to attain. In my early youth it would have been accounted presumptuous for a young man to aim at a professorship of philosophy. He must be "called" to this. He did not nominate himself. My hope had been to master my subject, preach a few years, and then to be so called. But a change in the educational estimate of philosophy had been coming about, especially since the appearance of President Eliot. It was not reckoned so audacious as formerly to aim directly at a college position.

Toward spring an eccentric country doctor began to build me up, without medicine, but with minute instructions on diet and mental conduct. He was a mental healer before medical fashions gave him the right to be. He taught me how to live. The building of a body is a slow business, but I knew myself on the way to it, and saw that with study, persistence, and daily self-denial it could be accomplished as certainly as the building of a barn. Now in old age I am in health that may be called perfect—no cold for five years, no headache for nearly twice that time.

V

In May I sent out applications to several western colleges for a place in philosophy. None of them replied. One day I met Professor

Kelsey, the temporary President of Michigan, Angell's predecessor. As we parted, I asked if there were no opening in philosophy at Michigan. He thought there might be, would look it up and write. While waiting for the letter I asked Professor Gurney of Harvard if I might use his name as a reference. He readily gave it, but said he thought I made a mistake in treating my subject as final and then looking for a college where it might be taught; better turn the matter round. Choose a first-class college and teach whatever they would accept. If I had power, it would be discovered and I should ultimately be in the place that fitted me. Daring advice! which I resisted. But three days later I received from President Eliot an appointment in Greek. I replied that I could not decide at once but must await an expected letter from the West. "And how long?" "A fortnight. If nothing then comes I shall be obliged to accept Harvard." Nothing came. Twenty-five years later President Angell showed me on the Faculty Record my appointment to an Assistant Professorship at Michigan, and underneath it in a different hand "Declined." All were dead who knew the circumstances. The only explanation I can imagine is a letter lost in the mail. The opening of the term was near, a teacher must be secured at once, nothing was heard from me, and my name was crossed off. My entire career was thus changed by a single mishap. So interlocked are luck and purpose in the game of life.

When I told Professor Goodwin that an objection to my entering his department was that I knew no Greek and could not write a Greek sentence if my life depended on it, he was most kind, saying that teachers drilled in Greek grammar were common, but trained in Greek literature rare. One of these would not harm his department. It harmed me though. Most of my time the first year had to be spent on moods and tenses. In an attempt to make my students perceive what these were for I offered, as we finished a Book of the Odyssey, to translate the whole at a sitting for all who cared to come. A large number came. Copies of the text were provided and the closest possible rendering was used. Hence arose the voluntary Greek Readings, a plan soon adopted in other departments. In successive years I read the whole Odyssey through twice, and in 1884 published a revolutionary version of it.

At the beginning of 1872 Professor Peterson resigned his position of Assistant Professor of Philosophy. I resigned my Tutorship in Greek and was appointed instructor in philosophy for a single year on a salary of $1,000. This was soon increased by $500, the salary of the Curatorship of the Gray Collection of Engravings, and by the large fees from three private pupils, the last I ever consented to take. Henceforth all my time was to be given to my own subject, in which I was appointed Assistant Professor in 1873, Full Professor in 1880.

VI

But here I must insert a section more frankly autobiographic, and sketch in a few words an influence which was the chief formative agency of the first half of my life. Naturally, so diffident and self-centred a person had few youthful love affairs. Their place was taken by one abiding loyalty. For ten years I followed Ellen Margaret Wellman, of Brookline. She lived but a few doors from my sister and was an intimate in my sister's household. No doubt I am prejudiced, but I believe everyone living in Brookline at that time acknowledged her as pre-eminent in fascination and accomplishments. A little creature, weighing less than a hundred pounds, all grace, vivacity, and charm, abounding in health and spirits, totally unacquainted with fear, either of man or nature, all she did or said was unique, though never queer.

Those were the days when girls did not go to college or take part in public affairs. But the education the best of them gave themselves, induced a refinement all their own. Miss Wellman was exquisite in all things, as a musician, actor, dancer, talker. She had read widely and with discerning taste. French was nearly as familiar to her as English. With all her brilliancy, too, and perpetual humour, she was deeply religious, a follower of Swedenborg and the mainstay of her little Church. Several years older than I, she allowed me during my Harvard and Andover days all the friendship I could ask—with occasional intimations of a limit beyond which not—until a catastrophe occurred, parting us for a time, but ultimately uniting.

A favourite brother of hers was in the class below me at Harvard. He looked forward to a scholarly life, but was struck down the year after graduation with quick consumption. He was bitterly rebellious. With her usual unselfish ardour, she abandoned all other interests to identify herself with him. She must be his only nurse. She did not leave his room by day and slept on the floor beside him at night. When he died he was at peace with himself and God. Up to that time she had never known a day's illness; from that time she knew no day of health, and she never regretted the sacrifice.

The following year she spent in the Azores, with little improvement in health, but great enjoyment. Her ability to enjoy no weakness could check. I was abroad all this time. We exchanged a few letters, only a few. But when I came home, broken too, the love of years could no longer be hidden. It had ripened in us both. Through much opposition from both families, on grounds of age, religion, and health, we came to our joyful wedding on June 15, 1871.

The specifically intellectual profits of an ideally happy marriage cannot be summarized. They are too subtle and permeating. But I will venture to name a few of the more conspicuous. Inclusive of all else was the wholehearted companionship which gave a deeper significance to all I did. She taught me to talk; for we talked all day, seldom of trivialities or gossip, but of things worth talking about. Able to go about but little, she entered the more completely into my work. The publication of my Odyssey was due to her urging, and to her it is dedicated. Innumerable students were drawn by her to our home, and her swift sympathies contributed something to the modern friendly Harvard spirit. Then, too, I felt it an enlargement that the sources from which we instinctively drew our spiritual sustenance were so different. She read her Swedenborg every day, and in the early years hoped to see me a convert. But at the last I think she liked me better as I was.

I should add also that the knowledge that we could be together only a short time sanctified those precious years and deepened their influence. For two years after her hæmorrhage came she could only speak in whispers. But this in no wise checked her gaiety or charm. We talked of her approaching death as freely as of any other incident. She advised me, after it should occur, to take rooms in the college buildings, herself selected the rooms, and planned how our furniture should be disposed. On February 10, 1879, she died. For eight and a half years thereafter, till Alice Freeman appeared, I lived among my boys in Stoughton Hall. My life with Alice Freeman has been detailed at such length elsewhere that it requires no recapitulation here.

VII

At the beginning of my teaching in philosophy I was merely the assistant of Professor Bowen. He directed all my work, even what books my classes should use. The Heads of Departments in those days took their positions seriously. Logic was required of all Juniors, and I was set to teach it in Jevons's *Elementary Lessons*. The class was divided into six sections, each of which I was to meet twice a week. Anything less nutritive can hardly be imagined. Jevons has carefully eliminated all philosophy from his clever and shallow little book, so that my twelve hours a week of work would seem to have been completely unprofitable to me and to my class. But they were not so, and I mention these repellent circumstances because I suspect they are by no means peculiar to me.

Beginnings are apt to be barren. Whatever gains can be extracted from them must generally be collateral, affecting the whole personality. These years proved excellent for the interminable study of teaching. In this I had made a fair start at Salem. But I had not

yet gone beyond the bounds contemplated in the common saying, "I am ready to teach pupils who are ready to learn." A higher order of teaching should be demanded of a college professor. He should be able to interest his students in his subject and make them wish to learn. In all my dealings with elementary and required work this was ever my problem, and I thought myself fortunate to have had it impressed on me so early in my career.

For many years Professor Bowen taught a course in Cartesianism with Bouillier's *History* as a manual. In 1874 he asked me to offer this as an advanced course, and for elementary work to take the whole Junior class together instead of in sections. Of course I welcomed this, my first serious encounter with philosophy. Only I resolved to deal with it in the original, in Descartes' *Methode* and *Principes* and Malebranche's *Entretiens*. To refresh my knowledge of French, Mrs. Palmer and I spent the summer of 1873 at Saint-Germain. This course I taught for several years with great delight and profit. Descartes has ever since been one of my closest philosophic friends. For the required course a series of wretched books were used—Porter, Bain, Hamilton, etc.—the best of them being Ferrier's unfinished *History of Greek Philosophy*. This enabled me to bring some genuine problems before my boys. When, too, Professor Everett, of the Divinity School, was absent for a year, I had the luxury of teaching Kant's *Critique* in his place.

It will be seen that at this time all the philosophic teaching at Harvard was historical, the presentation and criticism of notable men of the past. This was the general practice of American colleges, whether cause or effect of the low condition of philosophic thought one cannot say. Probably, as is usually the case in social phenomena, it was both. Such habits start in modesty and the conscious need of knowledge; but if persisted in to the exclusion of creative work, they are enfeebling. Learning and originality are not easily reconciled, essential though both are. At present too little history is studied. Our young philosophers lack balance. Fifty years ago they lacked courage. The coming of constructive courses made an epoch in American philosophy. I like to think I was the first to offer one at Harvard in 1889. It was announced as "Phil. IV, A Theory of Ethics Considered Constructively—Lectures, Theses, and Private Reading." Into this course I put the utmost of my powers for twenty-five years. Because it acquired a certain historic importance through attracting many men who have since won distinction, I will describe its method in some detail.

No one could take it who had not already spent a year on philosophy. In its first term every student was obliged to write two elaborate papers, one of them dealing with some eminent writer

who approached ethics from an empiric standpoint, followed by one from an idealist. But in each paper there was to be a sharp division. In a first section the writer was to make the best defence he could of his author's position, regardless of his own views, and not in the author's words; in a second, those views were to be stated. The theses of the second Half Year were on abstract problems—Freedom, Value, Vice, Punishment, etc.—where only the writer's own observations and reasonings were allowed. Meanwhile, I was expounding systematically my own beliefs, interposing at frequent intervals an hour of debate. My system was divided, not altogether wisely, into two parts. The first, under the title "Goodness," discussed the moral individual; the second, on "Duty," the claims of society. Throughout I endeavoured to impress on my men that until we had rid our minds of all notions of "radical" and "conservative" and confined our attention to evidence alone, there was no possibility of useful thinking.

Desiring to avoid large numbers and restrict the class to serious men who were ready to make some sacrifice to enter it, I chose for my hour 3.30 in the afternoon. The course being known, too, as far from soft, loafers and dullards avoided it, and its members were a stimulus to one another and to me. One compliment it received I have always cherished. A committee from one of the tables in Memorial Hall waited on me with complaint of my students who dined there. They made themselves a nuisance. They were forever discussing ethics, and so insistently that nobody had a chance for a word on anything else. That was impolite, I owned. But inwardly I glowed.

And since I have said so much about Phil. IV, I will venture to touch on two points more. While I never wrote a lecture, and kept only a continually altered note-book, I found that after going over the same ground for several years I became liable to routine, to reliance on memory rather than fresh thinking, I accordingly learned to drop the course every fourth or fifth year, and when I returned it was re-created. I noticed, however, that it was best the third year after my return, not the first. Royce taught another of these standard contructive courses, Phil. II, Metaphysics. Similar ones were springing up all over the country and were, in my judgment, factors in breaking up the early philosophic stupor. Notable examples of these were Garman's at Amherst, Howison's in California, Hyde's at Bowdoin. The regular quantum of my teaching after I became Chairman of the Department was a Seminary, once a week for two hours; an advanced course, three hours; and a half course, elementary, three hours, usually the History of Greek or Modern Philosophy. Believing that elementary work requires the greatest skill in its

teacher, we kept it entirely in charge of Full Professors and assigned our young men, who were generally specialists, to advanced work.

VIII

With the Department of Philosophy I was connected earlier than any of its other members. I have watched its entire development and have had my share in shaping its policies. Up to the time of my resignation in 1913 it included the following Full Professors—I name them in the order of seniority—Palmer, James, Royce, Münsterberg, Santayana; and four closely affiliated allies, C. C. Everett in the Philosophy of Religion, F. G. Peabody in Social Ethics, E. C. Moore in Christian Morals, and P. H. Hanus in Education, B. Rand always being our Librarian. It was a remarkable group. President Tucker, of Dartmouth, once remarked to me that he thought it not merely the strongest department of Philosophy the country had ever seen, but the strongest department of any kind. Its powers, too, were increased by duration, seven of those I have named being associated together for more than twenty years. I was in it forty-one. All, too, had published largely and made a name in general literature as well as in their technical subjects. The professors appointed since my time have fully maintained the standard there set. As Full Professors there are R. B. Perry. M. deWulf, W. E. Hocking, R. C. Cabot, W. MacDougall, A. N. Whitehead. My colleagues were men of genius who, independently, would have had a deep influence anywhere. But I believe that influence was doubled by certain ethical features in the organization of our department. Since these features have attracted little notice, though in my judgment they are well worth reproducing elsewhere, I name them here.

1. The former controlling Head of the Department was abandoned. A Chairman took his place. This officer called our meetings, presided at them, and was our medium of communication with the President. Every few years he was changed. In the course of time most of our professors served in this way and so became acquainted with administrative as well as teaching duties. Occasionally even an Assistant Professor was Chairman. But neither he nor any other professor had authority over the rest. All were equal and independent. When we met for discussion, or to draw up our programme of studies for the following year, we did so as a company of gentlemen all alike anxious to strengthen the department. If two mentioned the same topic as the subject they proposed for their course on the new programme, we talked it over and considered whether we had better double up, as is sometimes well, or fill a vacancy elsewhere.

One of the two professors always gladly withdrew, postponing his topic to a later year. The Chairman led the discussion and made suggestions, but exercised no control. The fact that no professor of ours was a subordinate gave dignity to the position and enabled us to call men of superior grade. I never knew anyone invited to join our staff who refused. This organization through a chairman is now, I believe, employed in many departments at Harvard, but extends itself slowly through other colleges.

2. We avoided "breeding-in" and directly aimed at diversity in our staff. When a new member was proposed, we at once asked whether he had not the same mental attitude as someone we had already. If so, we did not want him. There is therefore no Harvard "School" of philosophy. As soon as our students leave college they are sure to encounter all sorts of beliefs. We wished them to have a chance to study these beliefs under the guidance of an expert believer and then to have the difficulties in them presented by an expert opponent. This, we held, accomplishes best the great aim of a college: it leads a student to think for himself, to acquire the mastery of his mind. It so protects his after-years and saves him from subjection to the casual opinions of his little circle. We endeavoured to train leaders, not followers.

3. These differences of opinion in our staff were always openly acknowledged. In our lectures we were accustomed to attack each other by name, James forever exposing the follies of the idealists, particularly of Royce and me, Royce in turn showing how baseless all empiricism is, lacking a metaphysical ground. One year James and Royce combined in a course on metaphysics, Royce occupying the first half-year, James the second. One November Royce asked me to take charge of his advanced course for six weeks while he was lecturing at Aberdeen. I told him I hardly could, for I dissented from everything thus far in his lectures. He said he was aware of this, and for that reason had asked me. He thought my coming would enrich the course. I took it and devoted myself to pulling up all the young plants which Royce had carefully set out. When he came home he ordered a thesis on the entire work of the half-year, and he told me it was the best thesis he had ever received. Our students were not misled by these our attacks on each other. They knew that we were all warm friends, few departments more so. But truth was sacred, and criticism, the surest way of approaching it, was a friendly not a hostile process. We wished our students to cultivate the critical habit, learn to be dispassionate, and not allow personal feelings to encroach on intellectual judgments. James has admirably defined philosophy as the obstinate attempt to think clearly, and nowhere is such obstinacy more needed than for purging one's judgment from

personal bias. We were glad to be examples of this, of the honour paid to diversity, and the assurance that infinite reality might be approached from many points of view. And what happiness to work under conditions of entire freedom, where suspicions were unknown and friendships profound!

IX

In several of the interpolated years when I suspended my teaching in Phil. IV, I traced the course of English Ethics from Hobbes to Mill. Hobbes was always a favourite of mine. His eager thought, his frankness, and forthright utterance made me like to return to him often. I incline to think him our earliest writer of pure prose. His predecessors and contemporaries who wrote something that looks like prose did not think of it as a colourless medium through which thought might shine. They coloured it with beauty and meant to have at least half the reader's attention given to the diction, as in poetry. With Hobbes the thought is all. He cannot pause for anything else. The *Leviathan* is an impassioned cry to his readers to save the nation from impending ruin. The State of Nature is a state of war, where each seeks his own, regardless of his neighbour's welfare. The only escape is a social compact, where each agrees to give up something of what he desires on condition that others do the same. This is not done out of altruism. There is no such thing. It is merely an enlarged selfishness that, by abandoning immediate pleasure, reaps through peace a richer harvest.

Here Hobbes set the ethical problem for the next two hundred years. Many solutions were tried. I shall not refer them to their authors. Roughly and briefly as I state them here, it would be unfair to do so. I am not writing history, but merely noting steps in my own progress. Hobbes was told he had libelled nature. It contained two instincts, not one. Sometimes one is uppermost, sometimes the other. Moreover, from our earliest years, those about us insisted on our paying attention to their comfort and would not otherwise give us what we wanted. Thus through association the two impulses become blended and we give the more honourable name to the mixture. Or there is a kind of pleasure in helping the neighbour; another kind in helping oneself. But the former is so much "higher" than the latter that a little of it outweighs much of the other. Sympathy, the swift experience of what others are experiencing, is too obvious a fact in daily life not to have influenced ethics. Or again, Hobbes is right. Our instincts prompt us to pursue only our own pleasure. But in the Bible God bids us seek that of our neighbour also, and

threatens us with eternal misery if we do not. It is possible even to ignore questions of *meum* and *tuum* and make morality a simple problem of bulk. "Aim at producing the greatest happiness of the greatest number" will then be our maxim.

No one of these theories, not even that of Hobbes, fails to honour the claims of society. These are paramount. Apart from society all agree there is no morality. The problem is to find a connection between the claims of society and those of myself. Why should an individual self, a person, go outside himself for an ultimate ground of obligation? Must not life be its own justification? What shall a man give or take in exchange for his life? The oftener I returned to this historic movement the more urgent its central problem appeared. I early saw that self-realization must be our constant moral aim, but only by degrees I detected ambiguity in the phrase.

A child thinks of himself as a single independent being and has never happened to notice that no such being exists. In reality, a single person is a contradiction in terms. The smallest conceivable unit of personality is threefold—father, mother, child. It is true that as we grow the relations of father and mother largely fall away, but this is only because they are superseded by relations more comprehensive. That is, a person is an individual being plus his relations, and these relations are what constitute him to be what he is. What is there in me, I may well ask, that I have not received? What would I be if I were not an American, if I were not a Harvard man, if I had not had the friends I have had, or read the books I have read?

Such relations are not external, like those of space and time. They are constitutive. Therefore, when I call morality the fullness of self-realization, the complex character of the self must be borne in mind. I doubted if the English writers had felt this ambiguity of the self and I devised a couple of phrases to keep the two meanings unmistakable. These I have since used in my classes and books with decided advantage. Occasionally, and for a special purpose, I need to fix attention on myself in contrast to others. This I call the separate or abstract self. The real self, the self plus, I call the conjunct self.

In speaking, however, of the separate self as abstract and artificial, I do not deny that each of us is unique, different from all others, made so by the very relations which produce the conjunction. Still further, the weighty facts of praise and blame, and the very existence of morals, testify to some central agency in the conjunct self which enables me to contrast myself as permanent and causal with what happens to me. Rightly I say, "I have this feeling," not "I am this feeling." Otherwise it would be as absurd to censure me for a trespass as to censure the wind for blowing. In my book on Freedom I hope I have made this plain. In Royce's philosophy there is something

similar to this conjunctive notion. In his early papers, when analysing time, he points out how, though we must often speak of a present moment, nothing of the sort really exists, but only a relation to foregoing and oncoming time. And more elaborately in his last book the community is set forth as the fulfilment of the spiritual individual.

I like my term, the conjunct self, better, because it holds before the mind with less explanation the nature of morality, the meaning of virtue and vice. Virtue, the service of the conjunct self, calls upon us whenever we act, however slight the action may be, to see that more than our unitary personality is involved. I was walking down one of the paths in the College Yard the other day and saw a man in front of me reading a letter. When he had read it he tore it up and threw it on the ground. He had done with it; it was of no more use to him. He threw it down, never asking himself whether it was going to be agreeable to other people. That is the very essence of vice. Wherever we trace iniquity it will always be seen to amount to this, the setting up of the abstract or unitary self against the conjunct.

Something like this seems to have been in the mind of the early etymologists when they coined the word obligation. Translated syllable by syllable, this is ob-lig-ation, tied-in-ness, an excellent expression. Duty springs from relations beyond the separate self. There is the same suggestion in con-science, which bids us know, through connections. When a plate of apples is passed to me and I select the best one, there is nothing wrong in my having a good apple. I am selfish only when I do not consider others and am ready to make my gain out of their loss.

There was one of my predecessors at Harvard who was always careful not to ask a question of his class in Ethics until he had made sure that they could answer it. In those distant days we had only one connection with Boston, an omnibus which ran once an hour. The professor took this to illustrate selfishness. "Mr. Jones, if you were going to Boston this cold morning and as you walked to the hourly you saw a crowd moving in the same direction, then remembering that the bus had only a single blanket, you dashed past and secured the blanket—what would you call that?" "Presence of mind," said the student, a sensible answer for the separate self.

Pleasure is dangerous through its attempt to realize the self in an instant without reference to the rest of life. Evil patriotism tries to isolate itself, to the disparagement of other nations; just patriotism cherishes the characteristics of its own people because they form a distinctive contribution which it can make to internationalism. How disgusting to see a religious sect thinking of itself as the whole

thing, instead of trying to be a worthy member of the Universal Church! The jeering soldiery at the foot of the cross laughed at the folly of him who hung on it. "He saved others, himself he could not save." But he was saving that inclusive self of which they were ignorant. Well might Socrates say that the Delphic maxim, "know thyself," is the starting-point of morality. And I did not discover this starting-point until several years after I had been teaching Ethics! I think this is characteristic of progress in philosophy. It is seldom an even advance, but on a sudden an obstructing wall goes down and to the prepared eye discloses a broad prospect.

X

It is hard to estimate how great a debt we owe to daily companions, especially to those who differ from us so widely as to set before us a supplementary pattern of humanity. My debt to the men who diversified my department is simply enormous.

Hardly less is it to the mighty master of us all, so simple, so dignified, President Eliot. He knew little of technical philosophy, but he honoured the truth and truth-seekers everywhere. Our growth he watched with steadfast interest and gave us all the assistance we could ask. I was associated with him for thirty-nine of the forty years of his presidency; and living next door to him for half that time I was privileged with an intimacy which transformed reverence to love. Besides his all-comprehending intellect and his patiently persistent will I saw his tenderness and the ardour of his domestic affections, and I have felt that he was well described in a couplet of my godfather's, George Herbert:

> "He life's way knows
> Whom all his passions follow—as he goes."

No personal inclination ever diverted him from an approved end. In consequence of this dispassionate attitude, his estimates of men were almost unerring. He liked to surround himself with strong men, and this the more if such associates were critical of his policies. Edward Hooper, Alexander Agassiz, and Major Higginson were choices of his. From him I learned more about the wise guidance of life—and this is philosophy in the concrete—than from any other single man. Perhaps he was the greatest man I ever studied.

I am not sure. For another massive personality shaped me for ten years and in ways more strictly philosophic, Edward Caird. For a long time he was Professor of Philosophy at Glasgow University and probably more influential over Scotch thought than any teacher

of his time. Then he became Jowett's successor at Balliol. In those days German Idealism was challenging the Empiricism of Bain and Spencer. When Caird's first book on Kant appeared Eliot Cabot, the biographer of Emerson, called my attention to it. I saw at once its importance for me and wrote Caird asking to become his pupil for the summer of 1878. He replied that he had taken no pupils for several years, finding his summer necessary for refreshment. I took the next steamer to Glasgow and found him one Saturday morning reading Æschylus in the Greek. He was a man over six feet tall, brawny throughout, shy in manner, and with a strong Scotch accent. After we had talked a couple of hours, he said: "Won't you bring in on Monday afternoon a paper on Hume for discussion?" I did so and he ordered another on Kant's *Æsthetic* for Tuesday. Thereafter I spent two hours a day with him, and when he went to Ireland for the remainder of his vacation he invited me to join him. Some fears I had that all was not going well at home made me decline and return to America. That was the first of six summers, not always continuous, spent with this stimulating friend.

Our procedure was always the same. We took a furnished house and had the owner cook for us, often in the English Lake Country, sometimes in the Highlands where Gaelic was the native language and little English was known. After a simple breakfast we worked in our respective rooms at our respective studies till luncheon-time. When that was over, nothing could induce Caird to return to books. We must walk for three hours, accompanied by Mrs. Caird and a shaggy poodle dog known to Glasgow students as the *Ding an sich*. It always rained. I have gone six weeks without seeing the sun. These walks were our seasons of earnest discussion. Returning in time to bathe, to send our wet clothes to the kitchen and to eat a hearty dinner, we then read aloud till ten o'clock, when Mrs. Caird and I withdrew and left Caird himself for three hours more over books in all languages. A fresh box of them came from Mudie's each week.

He read with extreme rapidity and held at easy command all he had once known. I do not think he had paid much attention to physical science, but in all the varieties of humanism—History, Government, Economics, Ethics, Religion—he was prodigiously learned. He loved the English poets, too, but more still Dante and Goethe. In religion a Presbyterian, in politics an extreme Liberal, a propagandist for women's education and suffrage, he belonged to a club composed half of professors and half of working men which met for discussion on alternate weeks at each other's houses.

What I sought him for chiefly was his Hegelianism. He might fairly be called a sectarian Hegelian, for he could find no fault with

his master, and knew all his innumerable pages. I have gained more from Hegel than from any other philosopher, but I never became an Hegelian. Hegel has too slender a sense of personality and practically none of sin or conscious wrong-doing, a fundamental ethical fact. Freedom is his sacred word, but with him it means natural necessity and has nothing to do with the alternative choice of common speech. My Anti-Hegelianism I have developed at length in my book on Freedom. My relations with Caird were like those with James, of friendly and perpetual antagonism.

XI

Two questions were proposed at the beginning of this paper. What agencies have operated in America during the last half-century to transform indifference into the enthusiasm which has recently brought six hundred teachers from all over the globe to do philosophy honour in the Harvard Yard? Over the answer to this first question I have lingered long in an endeavour to trace the helps and hindrances which attended my slow, but probably fairly representative progress. An answer to the second question, about the conclusions reached by an average mind after passing through this transitional period, I have reserved as the topic of the remainder of this paper. Before treating it, however, I had better sum up *in abstracto* the working agencies of advance which hitherto I have presented only historically.

Table of influences aiding philosophic advance:

1. Resort to Germany for graduate study.
2. Professors make a specialty of single subjects.
3. Ph.D. first given at Harvard in 1873 to W. E. Byerly.
4. Possibility of aiming at a professorship even though not a minister.
5. Philosophic staffs employed in place of Presidents or single professors.
6. For courses beyond elementary, textbooks and mere criticism of authors abandoned and orderly constructive work expected of professors.
7. Lectures substituted for recitations, with assistants for quizzes and theses.
8. Books reserved in the Library and large private reading demanded of students.
9. Sabbatical years introduced at Harvard in 1878.
10. Descriptive pamphlets issued in 1889 by Harvard Philosophy Department.

PART II

XII

In religion all philosophy culminates, or rather from it all philosophy flows. To it and to its nearest of kin, Ethics, my life has been given. In the remainder of this paper I shall set forth as simply as possible the beliefs about the two, to which the philosophic wanderings hitherto described have conducted me. And in discussing religion I shall confine myself to Christianity as its universal type. For as we have it to-day it is all-inclusive and readily finds room within itself for the many precious half-truths of the other ethnic faiths.

My ethical beliefs are sufficiently stated in Section VIII, pp. 35–38. As regards religion it will be understood that I am not exploring its rise like the ethnologist, nor analysing its relation to branches of philosophy other than Ethics. I merely wish to show what place I believe it may rightfully claim in the practical affairs of to-day. But at the start a warning is needed against looking in the wrong direction to find its function. It has no use as a linkage. When in tracing the connection of events some necessary step is unknown, it will not do to call in God to bridge the chasm. Eventually Science will discover the absent link and religion will be discredited. I have no doubt that God's agency was needed for this link, but no more than for every other. The old-fashioned miracle, where God intervenes to meet an exigency not anticipated in the plan of the world, is out of date. I at least hold that scientific sequence is never broken.

The place where I find God is at the upper end of the line. Without the presupposition of God, Science is fragmentary and baseless. He is the antecedent condition of all being, the unitary ground of existence. Things of space and time are ever perishing, with them man has never been content. Knowing himself to be in some measure akin to what is beyond these, he has ever been stretching himself up, toward an object superior to himself, an object to which he may give himself in uncalculating loyalty. Science needs this transcendent object to impart an "always" to its truths. A person needs it as an object of loyal devotion. Religion begins, as does love everywhere, with the vision of a person or a cause greater than ourselves, to which, approaching with bowed head, we may give ourselves up, regardless of personal gain.

XIII

Because Science has been concerned with observation, it has with entire propriety come slowly to the conception of a unitary ground of existence. Primitive races begin with taking each event detachedly and asking no questions. More advanced, they group together similar phenomena and attribute these to the presence of an indwelling god. There is a god of the sky, of the sea, of the winds, of love, of music. This is polytheism and marks a decided advance in rationality. Men are no longer content to see something happen, but feel obliged to connect it plausibly with something else. And this can be best accomplished by thinking of gods of many groups, all separate. A further advance is hinted at by Homer, when in half a dozen instances he uses θεός in the sense of a general divine agency,

Now until about a century ago Science had not advanced beyond this point. It talked of heat, light, gravitation, electricity, etc., as separate agencies. But the discovery of the correlation of energies proved that each of these may, under appropriate conditions, be transformed into the others. Whatever happens in one group is affected by the whole. A unitary ground is now recognized with which all things, if fully traced, can be seen to be rationally connected. Therefore I think we may say that to-day, just in proportion as people are rational, no matter what their occupations, they acknowledge something like a god. They do not all call it by that name. Frequently it is called Nature.

But as soon as we are convinced that the one and the many are inseparable, so that wherever we behold a manifold we regularly presuppose a one in the background, two questions at once await us: Is this uniting one an intelligent being? And if so, what is his moral character?

XIV

To the first of these questions I know only a single plausible answer. For if we must conceive a groundwork of all that is, something in which we live and move and have our being, I do not see how we can leave out of it the element of intelligence. Evolution has gone on throughout the ages culminating in intelligence as its final stage. Can the compendium of all being be destitute of this? Is it not more sensible to think that intelligence has always been involved in existence, but has been only gradually disclosed? Such, at least, is my belief. Darwinism, attempting to exclude intelligence, is to-day widely discredited.

Furthermore, the view of intelligence as an original factor in the

creation of the world seems demonstrated empirically when we find intelligence in Nature responding to intelligence in us. The world is adapted to intelligent habitation. While much in it is still blind, the more intelligent we become, the more at home here we are. We are not mistaken in talking about laws of Nature. Such paths of intelligent order through what at first sight looked chaotic can even be expressed in mathematical terms without error and so enable us to construct a rational science. Would such construction be possible if we did not posulate reason as latent in all things?

XV

Let me here interpose a few collateral remarks which must be borne in mind as we proceed. It is often said there is no use in going off into philosophical and theological discussion, for such doctrines are always changing. The philosophy of one age is not that of another. When, then, we come upon a department of life that cannot hold its own, why not let it alone? To this I should reply that doctrines of philosophy do change continually. They never become permanently fixed. I should only have to add that this is far less true of philosophy and theology than it is of any other human interest. One might say with truth that the only fixed matter in the world is change. Change is a universal law. Nothing escapes it. In every department of human life it goes on, in every department of non-human life. But there are two kinds of change. There is one sort that sees it was mistaken and sets out again, only to have its new point of view pushed aside by the next that appears. This certainly is a depressing sort of change, but it is not the only kind. There are changes which carry their past with them, which see a deeper meaning than was perceived before and are continually evolving it.

Now when we ask: "What are the changes of religion, theology, or philosophy?" it must be said that they are predominantly of this second sort. Let anyone who doubts that the destructive changes in these departments are less than in others, examine any alcove of books on physical science in the Harvard Library. He will find that most of those written fifty years ago are entirely superseded to-day. They are dead things. What is asserted in them is not true. It is gone. Other doctrines have come up and taken their place. Then if one goes into the alcoves on theology and philosophy, he will see that a large part of the speculations and pronouncements of more than two thousand years are vital still.

They are not completely accurate. They stop far too short. There was a depth of meaning in them originally, which was not at the

time fully discovered. But they can be read to-day with instruction for all. What we are trying to undertake at present is largely a deepening of what is there. They have not been superseded. I would not overstate the contrast, real though it is. Looking back through the ages a scientist will stand out here and there as germinal, opening fruitful paths for his successors. But the history of physical science is of no such consequence in furthering discovery to-day as is the history of philosophy.

When, then, we consider the nature of an ultimate being, a god or ground of all things, and see that it must include intellect, we must not expect that this will be precisely the same god as was conceived two thousand years ago, or even a hundred years ago. It has been changing all the time because it has been deepening its meaning. I might go farther and say that when any one of us lays hold for himself of that mighty thought, it will appear with a special meaning, different for each of us. No one of us can comprehend in full anything so large. We may look in a certain direction with some assurance that it is a right direction, but our business is chiefly to see how far it can be adopted into our lives, to illuminate and give them strength. That will undoubtedly differ with different persons. We ought not to be shocked at finding that the way in which I approach religion is different from the way in which my neighbour does. Because each of us is but a fragmentary being we must content ourselves with fragmentary insights.

XVI

Preliminary education, I have pointed out, supplies us authoritatively with what is generally agreed upon in our community as regards the important facts of life. The university has a different aim. We come to it for purposes of criticism, to gain control of our own minds, to judge how far our inherited bank-stock of beliefs fits our case. What do these mean and mean for me? Nothing is good that has not been criticized and criticized continually. Some people are afraid of criticism. They say, "Oh, if you send a boy to college, he will go to doubting everything." Certainly! That is what he is here for. He cannot come to personal certitude till he has doubted. But I should not agree with the assumption that doubt means simply casting aside. Doubt has a positive office as well. It should bring out into fuller significance ideas which have been hidden under the incrustations of time. And such clarified beliefs are, in fact, commonly the result. All dictation is taken off during these maturing years. At least we try to take it off at Harvard. Yet it would not be easy

to find elsewhere a larger body of serious-minded, yes reverent, young men.

A peculiarly damaging doubt, however, will early occur to any reflecting mind. Suppose intelligence is inwrought in the framework of things. How vast is that framework! Our world occupies but a pinhead of space in the universe, and in that world I am but one person among incalculable billions. Is it not absurdly presumptuous to imagine that a God of all creation will attend individually to me, hear my prayer, and be pleased or offended at my conduct? Here is a doubt which disturbed the Psalmist and most modest-minded persons ever since. The Psalmist writes: "When I consider thy heavens the work of thy fingers, the moon and the stars which thou hast ordained, what is man that thou art mindful of him?"

Now I believe that this inevitable doubt establishes the very opposite of what it at first suggests. To our minds, the one and the many are usually set in contrast. In attending to the large, we are almost bound to overlook the small. But God, the intelligence of Nature, can have no such limitations. How absurd if he had! Gravitation and electricity are needed for some of the larger suns in the Milky Way. But since there is not enough of these agencies to go round, objects less than an inch in size cannot have them! Is it not more sensible to hold that not a sparrow falls to the ground without our Father? The obvious fact that God is infinite in nowise hinders his being minutely regardful.

Hitherto I have been approaching God on his least personal side, as the intelligence presupposed in the order of Nature. Such an approach proceeds on the principle that with like conditions like results always follow. Without this assurance that Nature presents a fixed order, science would be impossible. Yet no proof of the principle can be given. It is not a fact directly observed, as, for example, that sunshine is hot and snow cold. Nor is it demonstrable from anything else. When the sun rose this morning it brought with it no proof that it would rise again to-morrow. That is a working hypothesis which subsequent experience shows to yield valuable results. When in any case seemingly similar conditions yield an issue different from what was had before we do not accept the result, we suspect we have misread either the original conditions or the final issue. But in testing the matter we are obliged to employ the very assumption of unproved order once more. In short, this working hypothesis is unescapable. To deny it is to accept it. And this is scientific faith, not the credulity of the schoolboy: "Faith is believing what you know isn't so." Scientific faith, though blind at the start, yields verifiable results.

When we turn to the moral or personal world, the situation is

much the same. In Section IX I have maintained that the only possible ultimate aim of action is self-realization. There is nothing of greater worth than life to justify living. Only the self to be realized must be the conjunct self. If I set up a separate self and try to realize it, I confront no self at all. To find myself, I must go outside myself in loyalty to a personality beyond myself, and then, through subsequent experience, verify that a life more abounding has, in fact resulted. Nor will this, if rightly done, be but the experience of a single instance. The moral life proceeds under the working hypothesis of loyalty to a perpetually larger personality. This is religious faith. Religion is allegiance to this unitary basis of all personal being.

XVII

How can we gain fuller acquaintance with God thus involved in our very constitution? By resorting to those who, by their superior power, show that they have had the deepest experience of him. This is our method in other departments of human life. Take the recognition of beauty. We have not discovered beauty. It is not anything of my individual creation. It has been in the world a good while and has affected men profoundly. To ascertain its meaning, I might turn to Leonardo, who was not only a great producer of beauty, but speculated also on its nature. Shall he tell me what to admire? Yes and no. I am glad to listen to him, or to any other great master of beauty, and have him point out what it is that he counts beautiful. But I shall not take it on his authority. I shall listen only because I am justified in believing that these men have seen farther into beauty than any others I happen to know, and I want them to open my dull mind and lead me to see what they have seen. I shall then, casting aside authority, decide whether their teaching accords with my experience and tends toward my strength.

Now precisely this seems to me the way in which I grow in my conception of religion. I shall turn to those who, I believe, and who, indeed, the world believes, have had the deepest comprehension and experience of religion and who have united it most closely with life. I should like to come under their tuition and have them explain to me what they have found. Then I shall ask myself whether I can make use of their judgments for strengthening my conjunct life.

To-day, in our Western civilization, we have two chief aids in our comprehension of religion. They are widely unlike. One of them is a series of pictures describing the experience of a race that is universally recognized as pre-eminent in its understanding of religion, that is, we have the Bible. It gives us a series of pictures of a marvel-

lous people, and lets us see it grow in its conception of God. It began in the most elementary way where God appeared merely as a tribal deity, capable of all sorts of iniquity himself, and approving iniquity in others. Then we can trace that people criticizing such conceptions and mounting ever higher through a thousand years until in some of the Psalms there are examples of the most exalted lyric poetry that exists in any language and all of it impassioned with the experience of God. Here we are taught by an ascending series of pictures, that is, through history, the meaning of God.

On the other hand, men have busied themselves with consciously reflecting about these matters and have tried to formulate them into the most graphic and rational doctrines. An institution has been erected on this theoretic basis. We have the Church.

To each of us these two authorities appeal. Each tries to point out what we should think about God. Our business is to get as much illumination from both of them as we possibly can, and then subject it to personal criticism.

XVIII

Here, then, I am obliged to pass over into an individual confession of faith. I do not altogether commend it to others. They may find modes of approach that fit them better than mine. But when I ask myself where shall I find the deepest insight into the being of God, and learn how he can be best connected with my personal life, I have no doubt where it can be had. In Jesus of Nazareth. Confessedly his thoughts about God have shaped all mankind as those of nobody else have. We justly reckon all time with reference to his birth. Even those who maintain that he never lived acknowledge that the legends about him present ideals of incomparable value. Just the same, therefore, as when I sought to learn about beauty, I studied the acts and thoughts of Leonardo da Vinci in precisely the same way I turn to Jesus of Nazareth.

All sorts of stories about him have come down to us. They were carefully gathered, sifted, and reported according to the best understanding of those who knew him. This precious deposit I have, and I scrutinize it reverently, but I cannot accept every word that is there. I have to verify it in my own experience, asking, Would it strengthen me if I, too, thought in that way? I am told that Jesus was hungry as he walked across the plain. He saw a fig-tree in the distance and came to it, expecting something to eat. Not finding anything, he cursed the fig-tree. The story is out of character for him and for me. It is the petulance of a boy over things that work against him, a temper of mind that I try to avoid. But so common is

it that something of the sort was sure to drift into the record. Such stories, however, mean nothing to me. I cannot say they are all false, for much that originally I might have called false I now see to be true. Fifty years ago, those of us who tried to accept the New Testament had to carry a pretty heavy load when we read how Jesus, by a word, made sickness cease. These miracles we could not understand. We knew of no such powers in ourselves. It seemed as if such tales had better have been omitted from the narrative. We now see that their absence from the record would have discredited it. To-day it would require credulity to imagine such a being as Jesus moving through the world without such manifestations. We have discovered psychiatric powers in ourselves that were already familiar to him. How much farther their influence may extend, we are still uncertain. A miracle is only a physical change prompted by a person.

But more than by unworthy stories, more than by a too easy acceptance of the power of mind over matter, I am disturbed by occasional phrases which may be construed as identifying the nature of Jesus with that of God himself. This would strike a blow at the work of Jesus in redeeming men. It is true the number of such passages in the Gospels is small, and to get such a meaning from them they must be read with extreme literalness. "I and the Father are one." "He that hath seen me hath seen the Father." "All that the Father hath are mine." These are all from the Fourth Gospel. In the three Synoptic Gospels Jesus is sharply distinguished from God. God is his Father and mightier than he. His power is "given" him. He is commonly said to be "sent" by God. In two passages—and those, too, in John—he speaks of himself and God as "us" and "we." His will and God's are contrasted. In despondency he fears that God has forsaken him. Several times he prays to God, a shocking procedure if God and he are identical. And when a young man addresses him as "Good Master" he rejects the title because there is only one good, that is God. Duality is everywhere assumed.

How, then, did Jesus become our Redeemer? Paul answers briefly: Jesus broke down the middle wall of partition between man and God. Or again, he was the first-born among many brethren. The word at-one-ment would beautifully express the same idea. But it does not occur in the New Testament. It is frequent in the Old Testament, signifying a substitutive sacrifice. But this idea passed away with the Gospel. Each child of God is there called to be united with the Father as Jesus was and to be a vicarious helper of his still alienated brothers. The Synoptists, therefore, and even John himself, carefully avoid the outgrown word. Unhappily it was brought back by the early theologians, who found the Old Testament easier

to comprehend than the New. Under their influence the King James translators accepted the word atonement in a single passage, offering, however, the alternative reading, reconciliation. The Oxford revisers employ reconciliation with no alternative.

Recognizing us all as children of God and made in his image, Jesus shows us, by his own example, that the difference between God and man is only one of degree. There is no such being as "mere man," nor is Jesus himself mere God. Were he so he would cease to be an example or ideal for me. A stone bridge may be a model of firmness and of faithfulness in work; but it is no example, for between it and me there is a radical difference of kind. My exemplar must be in some respects my superior, but the more closely he is akin, the more influential he becomes. Jesus undertakes to show us in himself a way of living. Now, if through possessing a nature unlike our own he is partially immune from our temptations, he would not be for us a genuine way, truth, and life. He would be merely playing a part. I cannot accept so degraded a view. I have experienced too deeply his strength-bringing companionship. Undoubtedly there are mysteries in him which carry him beyond my full understanding. There always are in proportion as one becomes great, i.e. approximates God. And how does Jesus approximate him? Has he made any clear statement of the central principle of his life?

XIX

He certainly has. As I search his sayings, trying to draw from them for myself what made him strong, I find a sacred word to which he returns in almost every utterance. It is the word Father. "God is my Father" is a summary of his whole teaching. The very words he speaks have no value as his, but only as they are the words of his Father.

Here I seem to lay hold of something which illuminates all life and brings me strength continually. For what is a father's aim? If he is a true father, if he is working out to the full the functions of a father, he endeavours to educate his child, to bring out its powers on every side, to lead it into abundance of life. He does not, if he is a good father, make the child subservient to his own needs. He makes himself subservient to the needs of the child. He adjusts and limits himself so that the child may understand him. He makes it his first business to endear the child to him and himself to the child. He shows how under all circumstances the child may resort to him with assurance of supporting strength. Where there is such a true father, the union of the two is in spirit complete.

Jesus teaches, then, that God can only be thought of rightly as a father. Divine relations, he would seem to hold, are only human relations carried to a degree of development impossible here. This Jesus proclaims as a Gospel, good news to the world. Let us consider it a moment and see if it is not truly good news. There is no such thing as blind fate. God is our friend. Everything he allows to happen is intended for our good, not good in itself—whatever that may mean —but always an opportunity which, if heartily accepted, will yield good for ourselves and others.

It may be objected that this interpretation of divine relations by human is anthropomorphic, and we all remember the denunciation of anthropomorphism extending from Xenophanes in the seventh century before Christ to Matthew Arnold in our own. Xenophanes urged that if horses and oxen were to represent gods they would figure them as horses and oxen. Men are doing the same thing, and why should they not? Certainly a horse-god would fall far short of what we know. But how could a horse come nearer than by seeing something divine in his own power, patience, loyalty, and love? Those parts of him that depend on physical conditions here—legs, lungs, mane, hoofs—he might wisely omit, since he knows nothing about the conditions of life elsewhere. Those found of value in all living things he might more safely trust. In short, what he would need would be discrimination in kind. The Psalmist is soberer. He lets his god say: "Thou thoughtest that I was *altogether* such an one as thyself." Jesus frankly treats fatherhood anthropomorphically. This fact should be borne in mind when we read the two ascetic passages in which the father's act is treated as pollution and a long train of disasters is launched on the modern world. There is no evidence that this attack on the family, called the Virgin Birth, was known to Jesus himself, to his mother, his disciples, or to Paul.

The Good News of the Fatherhood of God I accept and find in it daily strength. Two inferior forms of hardihood have often appeared. One of them is Stoicism, the refusal to be crushed, the sense of an inner dignity which enables me to stand on my own feet, no matter what happens. A second of milder aspect is the habit of looking on the bright side. In everything one side is brighter than another. Let me turn my face in that direction. Before Jesus revealed the strength available through the Fatherhood of God, these palliatives had value. But they are superficial and do not touch the sources of inner peace as do the words of Jesus. Not that he was the first to utter them. They are rooted too deeply in reality for that. *Ζεύσπατήϛ*, Jupiter, had been heard of for centuries, but like *θεόϛ* had gone on deepening its meaning till on the lips of Jesus it became capacious enough to hold love.

XX

That God was his Father was then the central teaching of Jesus. That tremendous truth fixedly embodied in his life made him not only the King of the Jews, but of mankind. I want to summarize briefly some of the varieties of power that came to him through this understanding. They are open to us all. In my own small way I have experienced them and know the support they offer.

Chief among them is companionship. I am never left alone. Whatever happens brings me God's kind voice and an opportunity for growth coupled with bounteous outgo. This immediate intercourse with a loved companion is the feature of the gospel of Jesus dearest to the mystic in every age, and justly so. It was constant in the mind of the Master, turning seemingly severe experiences into occasions of joy and blessing. But many mystics overlook the conjunct self and seek to come into intimacy with God by removing themselves from men, going into a cloister, stripping off fleshly powers, and making themselves as miserable as possible. They fancy they commend themselves to their Father when reduced to a minimum. This negative path turns men away from him who came to bring us the abounding life of his Father.

Fears cease. The only thing worth being afraid of is now seen to be fear. That is disloyalty. It assumes that our Father has evil in store for us. But anyone who has tried will find that his constant care can be trusted. Even death prepared by him becomes a deeply interesting, but not appalling adventure. "Father into thy hands I commend my spirit."

Regret, fear of our erroneous past is banished too. No sin is truly repented until through comp ehension and counter-activity we are actually bettered by its occurrence. Sitting in gloom and dwelling on our foulness will not commend us to God.

Faith in fatherhood removes harshness from duty. Love transforms it. It becomes a kind indication of what had better be done to secure the largest ultimate freedom. Or if I fail at once to feel that kindness, I at least know the blessings I have been receiving from my Father; and here is an indication of what he will gladly receive in return; gladly I give it.

A foolish father, still more frequently a foolish mother, lets a child grow up in indulgent ease. A wise father develops his child by frequent hardships. He counts it no unkindness to send his son out on a wintry morning to buy food for the family. To most of us, our Heavenly Father assigns severities in gaining food, clothing, and shelter. Even if such severities are not in themselves goods ready made, they are—better still—opportunities for developing alertness, resource, and natural continuance of useful work.

Nor are such disciplinary difficulties physical only. We are offered abundant mental perplexities. Our Father might originally have supplied us with all needful scientific knowledge, instead of leaving it for agelong search. And what a petty universe we should have had, and what elementary minds!

What takes long in the training of a child, and what our Heavenly Father is especially careful to train us in, is the overcoming of time. Very gradually we acquire patience and learn to prefer a future good to an immediate. Our Father has arranged that the rush for immediate good shall usually defeat itself and in the long run bring injury. He generally suggests the direction we should take. But the most frequent of his prescriptions, is to wait.

Perhaps the most important training a father ever gives his child is an understanding of self-sacrifice, so-called, that is, the putting away of the separate self and learning how important the conjunctive elements are, far more so than anything attainable in our isolated capacity. The call to regard mankind as my brothers is only another form of the call to regard God as my Father. According to Jesus, the two together fulfil all righteousness. How closely he knitted them in his own case! Open-eyed he accepted death that others might have life, and though he felt the pang, he had no wish to escape it. "For this cause came I into the world."

XXI

Such acceptance of the guidance of a Heavenly Father is neither Fatalism nor Pessimism. Fatalism lives in a locked-up world where personality has no place. Everything happens because of a central unintentional "it." Jesus and his followers change "it" to "he" and so make room for selective action on the part of God and ourselves. Nor is it optimism. It does not assert that all that happens is good. On the contrary it is steadily contending with Evil and will no longer employ such phrases as good events and bad events. Events become good or bad according as they are used. Our Father furnishes us opportunities only. Out of whatever he sends good can be drawn, but so can evil. Optimism seems to me more immoral than Pessimism, for Pessimism warns us of danger, while Optimism lulls into false security.

But a serious problem remains. How explain a loving God's government of an evil world? There can be no doubt that evil abounds. We encounter it every day, particularly in ourselves. Is, then, God

limited in will or in power? In will, I maintain, and in that fact I find no aspersion on the being of such a God as I have described. Jesus interprets divine relationships by human. Now I have said that a wise father limits himself. He does not take his son and force him to go through certain acts. He does not impose himself on his child. He tries to develop the child's own desires and powers. He assists him, he shows him how he himself lives, he offers him every opportunity. But he expects the child to grow by experience, even experience of error. We might think that an infinite God would be able to stop all evil at once. The Heavenly Father of Jesus is too loving for that. Perhaps his limitation of himself for the sake of his children will be best understood by watching the same principle at work in modern education. At Harvard we must confess there are many loafers, men squandering time and opportunity and forming habits pretty sure to unfit them later for grappling successfully with the world. How shocking to tolerate such a mass of unintelligent evil? Are the officials here men of limited ability, or do they care nothing for their charges? Why do they not put a stop to this waste? The answer would be that their ability is limited, self-limited. They know that a student forced, as the routine education of the past attempted to force him, is no student at all. They therefore limit themselves to offering opportunities, to making those opportunities attractive, and letting the ultimate guidance, even if erroneous, be in the student's own hands. Men of independent intelligence are therefore trained here to-day to a degree unknown of old. Our Father in heaven had been using the elective system long before we discovered it.

Though Jesus announces his gospel as a universal one, several passages in the New Testament have an exclusive sound. Matthew says that Jesus shall save his people from their sins; John, that the world through Jesus might be saved; and Peter in the Acts that there is no other name given among men whereby we must be saved. But it should be noticed that wherever salvation is spoken of, salvation from sin is meant, not merely salvation from its future consequences. Yet even so, what becomes of the numberless tribes of men who never heard of Jesus? If we accept the teaching of Jesus and agree to see in human fatherhood a revelation of God, I think we shall consider the case of the heathen less forlorn than is often assumed. Each family has within it an outline representative of the Most High. Let this be studied and lived up to and Jesus' only way of redemption will be adopted. However superior our advantage is in beholding the great exemplar, no home has been left altogether desolate.

XXII

Such is my religious faith. In the midst of a perplexing world it leaves me peacefully at home in my Father's house with plenty of work still to do, but with the inspiration of knowing myself a fellow-worker with God and with the multitude of his other children.

And since I have written at such length upon religion, only a few words need be added on the relation of religion and ethics. So far as their contents are concerned the two do not differ. There is no act which is an essentially religious act. Its religious character depends on how it is approached. When we view it as it would be viewed by our Father in heaven, it is religious. Athletics is the opportunity for my obtaining a sound physical body and learning the care of my health. It is then as religious an act as going to a prayer meeting. There is, in short, no act which belongs peculiarly to religion. The Psalmist expresses this unqualifiedly:

"Lord, who shall abide in thy tabernacle? Who shall dwell in thy holy hill?

"He that walketh uprightly and worketh righteousness and speaketh the truth in his heart.

"He that backbiteth not with his tongue nor doeth evil to his neighbour nor taketh up a reproach against his neighbour.

"In whose eyes a vile person is contemned, but he honoureth them that fear the Lord. He that sweareth to his own hurt and changeth not.

"He that putteth not out his money to usury nor taketh reward against the innocent. He that doeth these things shall never be moved."

Such a sketch of the simplest moral acts is a code of religion also. Only the mental attitudes differ. In religion I face my father; in morals, my fellow-man, and each is supplemental to the other.

XXIII

It remains to state my belief about conscience and the objective ground of morals. Have we, as the Quakers say, an oracle within the breast which, if we only listen, will tell us infallibly in every situation what is the right course? I do not think so. Such extreme individualism disintegrates society and leaves no room to profit by experience. In this matter I am a follower of Jesus and of Kant.

Jesus held that the ten commandments were the best code of conduct then known, that we should not let our acts conflict with their precepts, nor even with their deeper implications. But he warns

his hearers not to imagine that there are here ten pieces of righteousness laid side by side, each with an independent claim. On the contrary, they are merely varied announcements, predominantly negative, of the fundamental command to love God and our neighbour, the seemingly double precept resolving itself on reflection into a single mental attitude. The lifelong contention of Jesus with the Pharisees turns on precisely this point. The Pharisees were not the hypocrites we picture. They were the holy men of their age, insistent that there is an objective righteousness for each occasion which should be searched out by the wise and followed authoritatively by the common folk. This casuistry Jesus denounces. Let each man be impassioned with a love of righteousness and then become instructed about its diverse workings through his own daily experience. Jesus did not deny that it is well to wash before eating, or that it is wise to consecrate certain days to other than secular uses. But he did object to having these acts standardized, determined once for all by some authority. To be significant they should be kept fresh and flexible. Undoubtedly the Pharisees were right in calling the method of Jesus dangerous. We can only answer that it is less dangerous to the higher life than leaning on any authority without or within. By stopping criticism and individual initiative Pharisaism prevents growth, and with it that abundance of life which Jesus came to proclaim. The Catholic Church in its sagacious instructions for the confessional has followed the moral method of the Pharisees. Protestants have preferred the opposite dangers, and they have been large. Nevertheless, I am a Protestant!

Briefly stated, the doctrine of Kant is that "ought," the imperative of duty, is ordinarily a hypothetical imperative, i.e. a command involving conditions. It is therefore of no effect when the condition fails. "You ought not to smoke. It weakens the heart." "But I do not care whether my heart is weak or strong." Then for you there is no command. Such are imperatives in general. They turn on some covert hypothesis, which is not present in every case. Is there, however, any unconditional, objective, or Categorical Imperative which underlies all others and is unaffected by circumstances? There is, but there is only one. It may be stated thus: Act as if the maxim of your action were to become by your will a universal law. There are other formulations of this but all amount to the same thing, viz. the only universal duty is the duty of respecting duty. Royce, holding that loyalty comes nearest to a complete expression of moral obligation, was asked "Loyalty to what?" and answered "Loyalty to loyalty." That was his Categorical Imperative, the only command of conscience. I, too, am a strenuous believer in a Categorical Imperative, but I phrase mine a little more simply. I call it the law

that there shall be law. Conscience warns us that acting from mere impulse, non-permanent desire, or reaction from stimulus, has no moral quality. A person is capable of something more than this. His will should express respect for law as law. It is true this is only a part of the story, the philosophic or a priori part. Kant calls it the form of ethics. The supplemental matter must be drawn from the special circumstances of the case. Just so when we are told to love our neighbour, we are not informed whether we should buy him stockings or gloves, or, indeed, whether we should buy him anything. This will vary with the state of the needy one's hands and feet. The precept of love is a categorical Imperative which applies regardless of circumstances. But these variable conditions are ethically as meaningless when parted from the imperative of love as is love when parted from them. The two belong together. Kant has been foolishly blamed for failing to see the partial character of his Categorical Imperative. But he intended it to be partial. He took upon himself the task of exploring the Metaphysic of Morals and never dreamed of superseding experience in the actual conduct of life. This latter he has treated with much subtlety of observation in a separate paper. But I think he has made it plain that taken by itself conscience is no compendium of diverse instructions as to how we should act in all sorts of cases. I know only one indwelling law, the law that there shall be law. Moral perplexity is possible and not infrequent. We encounter conflicting claims, and are obliged to say I would gladly do right if I only could discover what is right. In such cases, our only resource is to study the conjunct experience of ourselves and the race, and learn what has in the long run proved most favourable for fullness of life. As I have previously remarked, nothing outside life can justify living.

XXIV

Since in Part I I have described the great philosophic changes which have come about in my time, it may be interesting to note briefly the political transformations which have attended them. Every age is called a transitional time; and rightly, for change never ceases. But at certain periods changes are so rapid, and affect such large tracts of life, that they deserve pre-eminently the name of transitional. It is hardly an exaggeration to say that I shall die in a different world from that in which I was born. At my birth in 1842 there were twenty-two fewer states in our country than at present. We had not begun to acquire foreign possessions, like the Sandwich Islands, Alaska, the Philippines, and islands in the Gulf of Mexico. Two sudden shiftings of population deserve mention, one in Texas in

1848 at the close of the Mexican War, another in 1849 on the discovery of gold in California. The regular connection with the Pacific Coast was by sailing vessel around Cape Horn. The Middle West was thinly settled, Chicago having less than five thousand inhabitants. The first considerable Steam Railroad, that between Baltimore and Washington, was built in 1844. Of course, telegraphs, telephones, electricity, and radio were not in use. For our knowledge of events in Europe we were dependent on foreign correspondents. The first regular steamer, that from Liverpool to Boston, arrived in 1840, taking more than fourteen days for the voyage. As late as 1867, when I crossed, there were only small paddle-wheel steamers, and mine, a Cunarder, took thirteen days.

Few countries in Europe have remained unchanged. Victoria was, at my birth, in only the fifth year of her long and eventful reign. In France, Bourbons were the rulers. In most of my visits to Paris Napoleon III was the Emperor. Two of three revolutions there I have witnessed. Germany was a collection of petty states. In one of them, Würtemberg, my University years were spent. Austria was a huge and straggling empire, the over-lord of most of Italy. Her quarrels with Hungary drove Kossuth into exile, and I saw him received in Boston in 1852. The Crimean War of 1856, with the later Russo-Turkish wars, profoundly altered the whole East of Europe. Egypt first detached itself from Turkey and then, after the rebellion of Arabi Pasha, came under the control of England. Italy, which throughout my early life had been a collection of states, was united in 1860 by Garibaldi, Cavour, and Victor Emmanuel. France was overrun by Germany in 1870, and then gradually built up the vast French colonies of Algeria and Morocco. Spain went through many transformations, during the nineteenth century losing all her American possessions. The year of my birth saw foreign trade allowed for the first time in half a dozen cities of China. Japan was opened to foreigners in 1854, following the visit of Admiral Perry and the American fleet. India was a private possession of the East India Company till 1858. The Suez Canal was constructed by De Lesseps in 1860; the Panama Canal by the United States in 1914. South Africa was transformed by the Boer War. But it would be tedious to chronicle the changes in the many small countries, particularly those of Africa, Australia, and South America. Since the Great War, little remains of what was familiar twenty-five years ago.

XXV

This final section of my paper shall be an anatomy of myself. An autobiographer, by his very title, announces that he is willing to

have strangers draw near and inspect his inward parts. They cannot do so merely by becoming acquainted with the events of his life, for the same events may spring from a wide variety of personal origins. Only the man himself, if self-conscious, frank, and disinterested, can rightly interpret them. This now becomes my interesting and difficult task. I will try to describe the way I am made as I see it.

From childhood I was curious about the significance of that strange creature, a human being, so like, so unlike a machine. Puritanism saved me from any simple solution. It saw depravity and high aspiration living side by side. Fortunately modern study of character has turned in the same direction. Before Boswell, biography was for the most part written either to record occurrences in the life of a king or statesman, or else it had a moral aim, and sought through the presentation of some saintly figure to stimulate virtue in others. Boswell for the first time painted a full-length portrait with no other aim than portraiture. Johnson's defects are as manifest as his excellences. In our day Lytton Strachey in England and Gamaliel Bradford in America have taught us that the first step in understanding a character is to note its limitations and see what colour they impart to the entire person. President Tucker said to me long ago, "Don't let your defects bother you. Make yourself strong enough to carry them off." To the same purport is the warning of Jesus against pulling up tares in a wheat-field. The different roots are too closely intertwined to be lightly torn asunder.

Early I learned that because of an exceptionally bad memory I could never be a great scholar. To no avail were my many attempts at improvement, especially after the reading of themes and examination papers had made the matter every year worse. Encyclopædic learning I must leave to Germans. I regretted still more to find that continuous constructive thinking was forbidden me. Whether I was cut off from this by the general physical weakness of the first half of my life or by special brain conditions I cannot say. The result was the same, I was not designed for a system-builder.

Now it is foolish to sit lamenting over what one has not. The wisdom of life is to accept whatever comes and extract power from it. Accordingly I turned to criticism. Criticism became my sacred word. Readers of this paper must have been struck with the frequency of its occurrence here. Its simplest definition is the sense of inadequacy. Slightly modified as the "Glory of the Imperfect," it appeared as the title of one of my earliest papers. Combined with appreciation of beauty—beauty in poetry, pictures, architecture, or landscape—it becomes a mighty engine, successively revealing what is adequate or harmonious and teasing us to bring this perfection to birth. It has

been my guiding principle in many fields. I have altered successfully five houses. I never planned one from the ground up. I need something to begin with and improve. This ethical sense of a better in alliance with its twin sister, the æsthetic, trains practical judgment and makes one a generally useful person, resorted to by many for advice. Such advisory work has brought me much happiness and has enabled me to find situations for a large number of teachers. My recommendations are accepted because they are not generalities, but indicate just the work of which a candidate is capable.

Knowing that I was not a genius, was indeed in most respects less clever than other young men of my years, yet had my own way to make with little assistance, I was early led to feel the importance of work. All I have done has been costly in labour. Nothing in it is spontaneous. I have often thought I was planned for a loafer; but being born in New England was somewhat spoiled in the making. Sometimes I wonder that so many sons of the rich become men of power. They might have lived at ease and have rotted, if they had not had, a goodly number of them, a sense of moral responsibility to themselves and society. I have needed steady pressure, and have had it, thank Heaven.

The greatest longing of my youth was for literary fame. At that time this was a common desire. To-day the desire for wealth has taken its place. But I was badly hampered as a writer. Essentially a solitary, feeble in frame and ill at ease among strangers, I wrote few letters, talked little, and had no promptings to self-expression. Writing has always remained extremely difficult. The blank sheet of paper lying before me waiting to be filled has never ceased to be an object of horror. Yet I have printed seventeen independent volumes and am on the whole glad of the pains they have cost. The lack of fluency has saved me from writing nonsense. Style wins a certain dignity when one feels that the subject has been seen clean through and is meant to be stated just so. Easy writing is usually hard reading. Hard writing, if right methods are employed, makes a reader's work easy. As my modes of writing are the result of a good deal of study, I will sketch some of them here.

The peculiar feature of my writing for publication is the double copy, one for me, one for my reader. Whatever I write to-day is written with the aim of truth and fullness. Into it goes everything which might at this point have a bearing on the argument. But as this draft is merely a gathering of material it would be hardly intelligible to anyone but myself. To-morrow I rewrite this, discharging from my mind all consideration of truth, and studying simply ease of apprehension on the reader's part. The order of the sentences will frequently require revision. Some word or sentence

will "stick out" and attract undue notice. The sentences may have too little variety of pattern. I shall come upon hitches which will oblige a reader to pause an instant. Unnecessary words will be discovered, even repetitions. But everywhere ease should be the one thing sought, the test of its attainment being: Does the page, on being read, seem short? These two aims, of truth and ease, are apt to be confused by many writers. When they come to their second writing, they are still thinking of accuracy. They remember something which had not occurred to them before, perhaps some qualifying clause which would add a fresh shade of truth, and in it goes, checking the smooth flow of the page and compelling slow reading. This is no time for additions, but for dropping everything that can be spared. Of course, some repetition will be useful to save the reader from being forced onward more rapidly than his mind can travel. But it should come in the guise of humour, illustration, or simplification.

One of the commonest hindrances to easy reading is the long sentence. I went through a paper last year which averaged four sentences to a page. It was dismal reading. I had almost forgotten the beginning of the sentences when I reached their ends. The writer was evidently merely clearing his own mind, with no thought of a reader. Yet I must acknowledge that a long and well-built sentence sometimes adds weight to an argument, while too many short sentences become choppy and annoy the reader with a perpetually fresh start. I am afraid my writing has often this fault. A judicious mixture of longs and shorts is best. The short sentence, too, should have importance, like a headline, unless it is the three or four words which come as a relief at the close of a complicated exposition. In any case the principle is plain: the reader is the important person; devices to engage him will always be in order; the architecture of style must never be forgotten; and ease must be an object of effort.

My procedure in speaking or teaching is different. Most of what I have to say can be found in some book. The only valuable element I can add is myself. Evidently, then, the minute methods I have been prescribing for a writer will be of little use to a speaker. Indeed, if I have a complete draft behind me of what I am going to say, I am wrecked. For the two processes of remembrance and live personal thinking are antagonistic. When I am trying to recall a phrase, I cannot think, and while I am thinking words must take care of themselves. Before speaking I must fill myself freshly with my subject, no matter how familiar it is. I may have spoken on it before, but I must have at hand only so much memoranda as will keep me from sprawling. After some hours of study and reflection, I draw up on a quarter sheet of paper an outline of the topics I propose to discuss, with special attention to their order. Whatever is simplest and

easiest to comprehend should, of course, come first, whatever is more complicated later. I even assign the amount of time the different portions of my programme will require, but no sentences are written. Then with a mind stuffed with my subject, an orderly path visible through it, my outline and watch on the table, I stand before my class and begin to think aloud, as for myself, in the plainest language, letting the thought summon its own vocabulary. Somehow or other, the personality goes across. It is an untraceable and vitalizing influence, easily catching, though you can't vaccinate with it. Observe, or try to place it, and it disappears. Yet, while anything already written ruins me, I find that I speak better on a ground I have travelled previously. Perhaps while personality demands freedom, it is emboldened by exercise. Fear is its subtlest foe. Until a speaker is entirely at ease, his hearers will not be.

But there is more in teaching than this: there is moral discipline. In it one gets his best training in Imagination, which once gained—yes, gained in any considerable degree—invigorates every power of him who gains it and makes all the world around the better. For by imagination I mean the ability to put myself in another's place, think his thoughts, and state strongly his convictions even when they are not my own. Many a worthy man I have known who was altogether willing to do his share of the world's work, but was quite shut off from his fellows by lack of imagination. Men called him selfish, but he was not exactly that, only constitutionally incapable of seeing anything beyond his own horizon. On the other hand a man of imagination is welcomed everywhere, for he is a better father, friend, minister, lawyer, doctor, author, shopkeeper, or member of society, being able swiftly to perceive the diverse minds of these people and to adapt himself tactfully to each. Why people are willing to face the frictions of life without imagination is a mystery.

A few years of teaching will convince anyone of the need, the possibility, and the attraction of acquiring it. Each pupil differs from every other, and all stand at a long remove of development from their teacher. To be able to meet them all helpfully has been the fascinating passion of my life. It is a piece of Fine Art in which I have been enabled to meet with some success. Of course, I have fallen far short of a perfect teacher. No such being was ever known. But by perpetual criticism I have brought myself to circumvent a new batch of errors almost every year. Before my mind began to fail under my last surgical operation, I think I had attained much of what I sought. To meet everyone with considerate tact, was becoming almost habitual, and the habit bred a dispassionate mind. I do not so often mix desires with my judgments as I see many around me doing.

Professor Shaler once remarked that there were two sets of Professors at Harvard. One was absorbed in private study, another observed also the general course of the University, noted its defects and was ingenious in proposals for their removal. I have always belonged to this second group. It fits in with my dominant method of criticism, i.e. with making my start in a given defect and aiming at betterment. This leaning toward administration has brought me many calls elsewhere. But I have found more interest in the further advancement of what is here. There has been no lack of variety. I have been connected with five departments—Greek, Philosophy, Divinity, Fine Arts, English—in two of these, taking the place of absent Professors. At six of our affiliated Western Colleges I was Exchange Professor, and many years before the Great War I was offered the Exchange Professorship in Berlin. This I declined because I was unwilling to meet the Kaiser, whom I regarded as the most dangerous man in Europe. As regards offices, I have been Tutor, Instructor, Curator, Assistant Professor, Professor, Professor Emeritus, Overseer, pretty fully a Harvard man. Harvard and six other universities have given me honorary degrees.

I remember how Dr. Andrew Peabody warned us students one morning at Prayers: "Young men, be careful what you dream. Dreams are apt to come true." I dreamed of happy marriage, of a large library, of foreign travel, of clearing my mind of philosophic and religious perplexities, of teaching in some great university, of being widely loved, of strenuous middle life with an old age of health and financial ease, of winning fame, especially as a writer. Looking back I can say I have little more to wish. The years have brought substantially what I asked—opportunity to do useful work as an organizer of one of the most distinguished departments of our foremost university, with more than fifteen thousand students in my classes, and kind faces meeting me wherever I go. Three of my books may live for half a century—my books of affection and gratitude—*George Herbert, Homer*, and the *Life of Mrs. Palmer*. The first was not intended for wide circulation, but was an appeal to scholars in behalf of a much misunderstood poet. The London *Times* gave it two strongly commendatory articles, and declared that whoever dealt with Herbert hereafter must take this book into account. The second I tried to restore to nature and redeem from artificial "Classicism." The sales of my translation of the *Odyssey* have increased in each of the thirty odd years since it was published, during the last three being over forty thousand a year. More than fifty thousand copies of Mrs. Palmer's *Life* have been sold. She herself has become a kind of patron saint of college girls and has been elected to the Hall of Fame. As I see these things rising behind me they do not seem of

my doing. Some greater power than I has been using me as its glad instrument.

NOTE

Perhaps I should say that this Anatomy of myself is not intended as a complete autobiography. Being addressed to those who, for the most part, are teachers and writers, I sketch only those traits which directly concern their work. Several, even more fundamental, I have not mentioned. For example, I have inherited the Puritan distaste for ornament and prize simplicity. With this goes a passion for order that almost amounts to a disease. If anything is a little out of adjustment, I am as uncomfortable as a musical ear that hears a wrong note struck. While these traits have their worthy side, they sometimes lead me to harsh judgments.

NATURALISM OR IDEALISM

By GEORGE P. ADAMS

Born Northboro, Mass., 1882. Professor of Philosophy, University of California.

NATURALISM OR IDEALISM

PROBLEMS and ideas which promise to yield some measure of partial insight into their solution constitute the stock-in-trade of the philosopher. Hence I may best respond to the invitation to set forth my present philosophical beliefs by trying to formulate, not any framework of a completed system, but rather a single crucial issue. It is central in the sense that it arises—so it appears to me—in each of the major provinces of human experience. It is one important point of convergence of fundamental questions in Ethics and Logic, Epistemology and Metaphysics.

It is the *problem*, and not any final or facile solution upon which I would lay stress. It will, indeed, prepare the way to an understanding of our problem if I observe that the very enterprise of philosophy itself appears to be problematic from the outset. I am not referring primarily to the historical divergence of philosophical theories, nor to the apparent contrast between *der sichere Gang der Wissenschaft* and the fluctuations and diversities of theories of knowledge, of cosmology, and of metaphysical systems. Whatever may be the nature and import of this contrast it does not express the deeper paradox of the venture of philosophy. For the contrast just noted arises merely from the fact that the philosopher is trying to do on a larger scale and for a vastly wider range of 'facts' essentially the same sort of thing that the scientist so well succeeds in doing for a more restricted and specialized area. What is really going on when a muscle contracts, when water boils, when a meteor falls? From specific questions such as these—questions for scientific investigation—to the widest field of cosmological speculation and hypothesis, to the question as to what is going on in nature as a whole, where 'nature' includes human brains and the events of history, there is complete continuity of theoretical interest and of method. To be sure, the wider the area under investigation, the more hypothetical and speculative are our results, the less certain and empirical are our conclusions. But throughout *this* realm, from the most specialized problem of specific laboratory research to the widest survey of nature as a whole, the investigator, whether

scientist or philosopher, is confronted by 'facts' which he seeks to explain, to grasp intellectually by means of an adequate theoretical insight.

This is never, I think, either the whole or even the major task of philosophical study and reflection. To state the matter quite boldly, without apology or subterfuge, the driving force behind philosophy is the desire to know what meaning and what value, or what lack of meaning and value, may be ascribed to human life and experience and to the setting in which they occur. Susceptibility to meanings and values may be the ear-mark of the 'tender-minded,' whereas the 'tough-minded' soul is content with 'hard facts,' the hardness of which is gained only when the film of meaning and value is scraped away. If we choose to state it thus, then I should say, quite categorically, that there is no such thing as a tough-minded philosopher or philosophy. Science is as tough-minded in this sense as you please. But by no sheer quantitative extension of the area of hard facts which come within the sweep of our survey does a scientific hypothesis grow into the stature of a philosophical theory. It does not do so unless, rightly or wrongly, such an area of facts is made the occasion and the basis for a comprehensive judgment upon the meaning of things.

Just here lies the initial paradox of philosophy. Philosophy is the desire for, and the love of, knowledge. It is *theoria*, understanding, contemplation, insight. In this it is not different from pure science. Yet the range of that into which it inquires and about which it seeks understanding and knowledge seems most intractable and opaque to theoretical appraisal. *Facts* may be thus known and in some measure, perhaps, understood, even very wide ranges of facts and events spread out afar in space and time. But the meaning or value which any fact or series of facts is said to have seems not to belong to the fact in the same 'objective' and describable way in which those aspects of fact do which elicit and which (in part) satisfy our theoretical curiosity. Meaning and value are felt or appreciated, they are correlated with those of our interests which are not primarily theoretical and disinterested, with sentiments and loyalties, hopes and fears, desires and aversions. Yet the driving force of philosophy, as distinct

from science, is the desire to reach intellectual clarity with respect to just those meanings and values whose very nature seems to preclude them from the domain of what can be known and understood.

It follows that the enterprise of philosophy is—for us—threatened at the very start from two opposite sides. The philosopher may be tempted to renounce, as does apparently the scientist, any hope of rendering an intellectual judgment upon the meaning of things. This renunciation may, on the one hand, lead him to extend the categories of scientific description and explanation beyond the specific and restricted regions with which the scientist, as such, is concerned. He will in this case seek to embrace the whole of nature and life and mind within the framework of generalized scientific conceptions. In being thus extended and generalized, in being applied to such large areas, these conceptions may seem to the scientist to have lost their rigour and their precision. They become less verifiable and more hazardous. For this reason the scientist will dub them speculative and philosophical. But in truth they are prolongations of scientific effort and achievement; like the science which we know, such extensions, whether called philosophical or scientific, are never primarily concerned with meanings. They seize upon some one prevailing and dominant scientific concept of the age—matter and motion, evolution, stimulus and response, relativity—and read everything concerning which we may be intellectually curious in its terms. But that which, as philosophers, we most want to know, the meaning of life and of reality, of the search for truth itself, is either passed over in silence or it is taken as an easy corollary of such quasi-scientific generalizations.

On the other hand, impressed by the inability of scientific description and explanation—even when extended and generalized to render intelligible meanings and values—the philosopher may be led to distrust the competence of theoretical insight with respect to all those regions of experience in which something of meaning and value, something other than brute fact, presents itself. Romanticism and intuitionism, mysticism and irrationalism spring from a disbelief in the possibility of reaching any theoretical

clarity with respect to meanings and values. They thus show themselves to be twin sisters of a naturalism which, with this same disbelief as a premise, restricts philosophy to the task of describing everything as a natural and neutral substance or event determined to be the thing it is by causes and energies which are wholly factual and 'natural.' The venture of a philosophy which declines wholly to merge itself either with such scientific pursuits as disregard of necessity, the meanings and values of things, or with the immediate, practical, and unreflective activities of living, is thus itself something deeply problematic if not paradoxical. Philosophy is not science because it interests itself in meanings and values; and science, as we know it in modern life, is bent solely upon a descriptive and theoretical insight into what things are and how they behave, irrespective of any meaning or value which they may have for our non-theoretical interests. And philosophy is not art nor religion, neither poetry nor life. Meanings are present here in abundance, but they are not made the deliberate objects of study and reflection. They are lived and are had rather than known and understood. Philosophy is indeed problematic from the outset, threatened with the danger of being overwhelmed both from the side of science and from the side of practical life and immediate experience. The most enduring and the deepest worth of the main current of the European tradition of philosophy lies in the conviction that there is something here for philosophy to do, and which it alone can achieve. This conviction, and the analysis of human experience and the scene within which experience goes on, in the light of this belief is the enduring worth of the great historical systems of philosophy. There is nothing for philosophy to do which science and practical life cannot achieve with greater success, unless there are meanings embedded within experience which require reflection and theory for their apprehension and their clarification. This is, as it were, the initial if tacit postulate of philosophical reflection. A 'scientific' philosophy is a misnomer and a hybrid, and equally so is a 'mystical' or 'intuitive' philosophy.

The presupposition of philosophical reflection is thus the belief that there are meanings embedded within experience and that

their nature may be apprehended by thought. But any such statement as this at once imposes the demand that the concept of experience be clarified and in some way circumscribed. What right have we to say that meanings are integral to experience, and what status may we ascribe to such meanings? It is just here that our central and crucial problem comes into view. But before we attempt to formulate this, something must be said about the use of this most ambiguous and problem-breeding term 'experience.' The use and the connotation of this term, on the part of any philosopher, supply a touchstone for his entire philosophical edifice.

There are certain widely current uses of the term 'experience' in contemporary philosophy which appear to me quite unsatisfactory and positively misleading, and an enumeration of the more important of these will clear the ground for a more adequate analysis of the concept and a formulation of our main question.

Experience is no inclusive and self-contained domain or process, the boundaries of which (if there be such) are co-terminous with the boundaries of that realm with which life and knowledge, science and the arts are concerned. Experience may not be equated with reality, nor with the absolute. In so far as the post-Kantian (Hegelian and Fichtean) rejection of the *Ding-an-sich* committed philosophy to this identification, it rightly laid itself open to the charge of subjectivism, and prepared the way for the realistic revolt of the last generation. With the initial spirit and motive of this revolt I am in sympathy. Experience as that which we live through, as an *Erlebnis*, lies within a setting and environment which itself is not a literal part of the process or matrix of experience. But, on the other hand, the sole remaining alternative is not the reaffirmation of Substance and Things-in-Themselves, in a Kantian or pre-Kantian sense. We are not necessarily constrained by this alternative—either a philosophy of experience which denies the existence of anything which is not definable in terms of some experience or a realism (of a critical or sceptical tenor) which affirms a gulf between that which is real and that which is experienced. There are, at least, other alternatives whose

fruitfulness as philosophical hypothesis deserve the most careful consideration.

The central difficulty and ambiguity which I find in contempory Pragmatism springs from the neglect of that environment or setting of experience, similar to the neglect which mars so much of post-Hegelian philosophy. Pragmatism did not share in the realistic revolt against the identification of experience and reality, and the consequent tendency to neglect the environment of experience. It was Absolutism and not Subjectivism which bred the pragmatic revolt. The temper of abolutism was to be curtailed and chastened by stressing the temporal flux of the stream of experience, the perpetual alternation within the life of experience of moments of precarious stability and satisfaction and periods of stress, difficulty, and readjustment. All reflection and thought, science and philosophy, even consciousness itself had its sole function in resolving the strains and problematic situations within the stream of experience; all thought was pertinent only to its temporal antecedents and consequences within this stream, and not to anything outside and beyond. The stream of experience was not thought of as having any banks which were not part of the stream itself. How else could absolutism be avoided? Hence the persistent rejection, on the part of Pragmatism, of any metaphysics, and the judgment that the central issues of traditional epistemology are otiose because they refer to a reality other than the temporal events within the flux of experience and life. When Pragmatism—as was inevitable—was in consequence charged with being subjectivistic, it took refuge in the biological presuppositions from which it took its point of departure. Organisms, which undergo life and experience, of course exist within an environment which provides the stimuli and the objects of their responses and their adjustments. What more of realism is wanted than this biological framework of environment and organism, stimulus and response, nature and life? But in its theory of knowledge and logic and in its (implied) metaphysics, this realistic reference to a real, which is no constituent of the temporal process of experience, is—so it seems to its critics—strangely enough, missing. Were it not absent, Pragmatism would be more

kindly disposed to regard as legitimate a metaphysical interpretation of the nature of the real—of the banks within which the stream of experience flows.

Experience is, then, neither inclusive of the whole of existence nor is it self-contained; every pulse of experience bears upon and makes reference to a somewhat which is not any existent constituent of the stream of experience itself. The import and truth of this statement are obscured when it is said that experience itself is bi-polar, that it contains a subjective and an objective aspect, as if the banks between which a stream flows were a part of the stream itself. The duality in question is not internal to a substantive course of events which is existentially aloof from things, from nature, from reality. If nature is closed to 'mind,' it is not closed to experience. Experience is the meeting-place of organism and environment, of selves and the world. In this sense experience is incorrigibly metaphysical. There is no description of any experience which can dispense with terms having their locus in the one common and real world. To judge that any 'experience' is wholly illusory, false, private, and subjective, and hence cut off from that one common and real world, presupposes a prior reference to, and knowledge of, that objective world as a standard of reference. Were experience but a dream we would never know or judge it to be such. Nor is such a judgment wholly extraneous to the illusory or dream experience, itself a subsequent act of reflection. The very experience itself contains, however implicitly, that reflection and that knowledge. The only possible type or instance of experience which might seem to provide an exception to this objective and metaphysical character of experience would seem to be a pure, momentary, and wholly immediate feeling which is entirely *zuständlich*, and not in any degree *gegenständlich*. But were such feelings to be found—and I am not convinced that they ever are—they would be the most rudimentary and least typical types of experience, where experience has nearly vanished or is barely beginning.

It will be seen that 'experience,' as the term is here used, is not synonymous with 'consciousness' or 'mind' in the sense with which these terms are loaded in the modern psychological,

Cartesian, and Lockian tradition. The stream of experience, of living, of doing, of striving, and of thinking, is no series of states or events existentially unique and isolated from the common environing world of nature and of reality, of fellow-men and historical structures. Such isolation and detachment, such subjectivism as has coloured so much of modern philosophy and psychology, are nothing indubitable and self-evident. They are the residua and corollaries of historical and social forces—in politics and economics, religion and morals—which have fashioned modern civilization and which have left us with nothing final, but rather with tasks and problems. The identification of experience with consciousness, and the consequent absorption of metaphysics, morals, and epistemology in psychology, is a partial and abstract point of view, useful and necessary for certain purposes whose complete achievement would require the complimentary redintegration of psychology with science and metaphysics, history and ethics.

The chief witness, in modern philosophy, to the problematic identification of experience and consciousness and the resultant isolation of experience from reality, is the dominant position of the problem of knowledge. That problem is insoluble and consequently, I should say, meaningless if it be supposed that from a state of affairs entirely subjective, mental, and immediate, a reference to, and knowledge of, an independent real has somehow to be generated. There is no road from an initial substantive isolation of ideas to any subsequent cognitive intercourse with real things. It is the isolation which stands in need of explanation and justification, not the objective reference and cognitive intercourse. Once assured of an integral relation to reality, the 'new way of ideas' may yield fresh and significant results. Deprived of that relation *ab initio*, it is barren.

This vital concourse of what we call self and world (though as yet the words 'self' and 'world' are but symbols of the two somewhats which meet in every pulse of experience) is exhibited not solely in cognitive experience. Buying and selling, sowing and reaping, planning and doing, loving and hating, as well as seeing, hearing, and thinking—all such and countless other experiences

show the same typical structure and relation. There is in each of these, on the one hand, an attitude—a stretching out toward something, an interest; and on the other hand an object—that at which the attitude is aimed and directed. We use things, we know and contemplate things, we enjoy and appreciate things, we seek and we shun things, and of such doings and sufferings are our experiences comprised. In each of these there is the same typical compresence of act and object, attitude and thing, self and world.

This literal and vital compresence of two factors is clearly present in such experiences as petting a dog, looking at the starry heavens, or driving a nail. Yet there seem to be experiences in which this compresence is absent, in which there are no things or objects belonging to the one world of nature in space and time, but only internal processes whose objects (if they have any) find no lodgment in nature at all. Such are the experiences of dreaming and revery, imagining and thinking, longing and planning for that which is not real and not in one's possession. The objects which form the complements of such acts and attitudes as these (for *some* 'object' there is in every dream, illusion, and desire) appear to be unreal and ideal. They are objects because they are what we dream and think of and not our acts or processes of dreaming and thinking. Yet they differ so, are so multiform and mutually inconsistent with one another and with 'real' things that some habitat, it seems, must be provided for them apart from the realm of natural, particular existences in space and time. They then comprise an ideal realm—'ideal' in no eulogistic sense, but rather in the negative sense of objects which are excluded from the world of natural existences. This is one genesis of the bifurcation of existence and essence, a motive and a conviction that, at any rate, bear witness to the fact that experience is not in all cases the simple compresence and meeting of two natural existences—physical stimulus and bodily response, or natural thing (in space-time) and a psychological or biological process equally restricted to the dimensions of natural existence.

There are, so far as I see, two alternative and divergent paths which open before us at this point, and the problem to which we have been leading begins to open out. The issue which arises is

not that of Realism or Idealism as commonly depicted. If we are to use conventional shibboleths at all we shall have to describe the issue as lying between Naturalism and Idealism, both of which are realistic—committed equally, that is, to the conviction that experience is not a substantive, isolated stream of events, subjective and internal, but is the meeting-place of an independent and objective world and of acts, attitudes, and interests.

The question at stake is the central problem of metaphysics. What is the real world, the independent and enduring environment within which our experiences transpire, within which we live and do, enjoy and suffer, achieve and fail? That there is a world—or, if you chose, many worlds—of objects which are experienced in the manifold acts of experiencing, seeing, thinking, desiring, loving, and the like, this is indubitable. All experience is objective in this minimal and neutral sense—neutral because the metaphysical status of such objects has still to be determined. Are these objects real or illusory? Do they exist within the spatio-temporal order of nature or do they merely subsist in the more shadowy realm of essence? All that we are as yet sure of is that they are the objects upon which our acts of experiencing are directed, and that they cannot, with fairness and impunity, be identified with our experiencings themselves. The alternatives confronting us now are these: (1) The real, independent world shall be identified with a restricted or selected class of such objects. All the other objects which fail to conform to the standard set by this privileged type shall be judged to be unreal; they will be said to be subjective or psychic additions, or merely human interpretations and elaborations of simple natural stimuli, or they will inhabit a non-human domain of subsistent and ideal essences, as objective as you please, but not by any right of their own clothed with real existence. In any such framework of thought, reality is made amenable to the demand for simplicity and a kind of absoluteness; it is identified with a central core or nucleus whose complex apparent wrappings are lent to it through a medium not of its own stuff. Material atoms characterized solely by size, mass, and motion impinge upon sense organs and nerve tissue and generate a rich world of secondary qualities far

outstripping in their content and texture the simple spatio-temporal processes in which they—mysteriously—originate. Such relatively simple and absolute physical processes are alone real and objective. The complexly variegated world which issues from their impact upon bodily organisms bears no resemblance and holds out no clue to that which exists and transpires within objective nature. Likewise from the side of men's practical life and experience. Relatively simple and permanent natural interests, impulses, wants, and instincts, generate in the medium of history and men's minds ideal ends and purposes whose scope and whose content are wholly human and subjective.

Such is the framework of Naturalism, and it provides one great metaphysical alternative. Is it possible to place our finger upon any one central and underlying motive which yields the formative, logical drive in the direction of the various types of Naturalism? I think that it is. And, strangely enough, it is a logical doctrine and scheme of thought which was fastened upon men's minds in the classical period of Greek philosophy. It lies in the presupposition and belief that in anything whatever there can be discovered a central, nuclear, essential, and substantial core—that which the thing *really* is—and in comparison with which most of the thing's seeming qualities are accidental, non-essential, and contingent. These are to be simply disregarded in any successful attempt to know what the thing in truth is. They depend for their appearance upon the extrinsic relation of the thing in question to other things; *they* are not intrinsic to its essential nature. If they exhibit themselves variously in different contexts, the essential or substantial thing itself is simple and unchanging. It is likewise absolute, unspoilt by any of the relations which lend to it the appearance of complexity. Thus simplicity, unchangeableness, absoluteness are the marks of anything's essential nature, while complexity, variety, and relatedness characterize its attributes and accidents. What we perceive—the objects and events of our direct experience—touch only the extrinsic and contingent and merely apparent qualities of things whose essential, unchanging, and simple nature can be grasped only by thought, by concepts, which are reached through a process of abstracting away these

irrelevant and inessential qualities. The hold which this intellectual framework has had upon the European tradition of philosophy and science can scarcely be exaggerated, from the inception of the Aristotelian Logic to, say, the eighteenth-century doctrine of individualism.[1] This doctrine implied the twin beliefs (1) that each individual possessed an essential nature (the 'natural' ingredients, rights, etc.) surrounded by contingent and historical, positive and relational qualities external to his 'real' being, and (2) the belief that this essential core was present in all individuals, resulting in their essential equality. The significance of the historical and romantic movement of the nineteenth century (as well as that of Hegel's Logic) lay in its criticism and implied rejection of this logical presupposition, in its attempt (however unsuccessful the outcome) to bridge the gap between the essential nature of individuals and their contingent, historical accidents.

The philosophy of Hume exhibits, I think, in the clearest and most rigorous way, the results of applying this logical motive and framework to the analysis of human experience. For, as Hume sees, the direct objects of human experience—the world within which we act and plan and live—are characterized by pervasive relational complexities and not by simplicity, isolation, and absoluteness. The relation which was seized upon by Hume as central was that of causality. We live and act in a world in which things and events hang together and imply one another. Yet the real world, once it is known for what it is, is composed of atomic and isolated simple 'impressions.' Each impression is a little absolute. Hence the complexities and relations which characterize the objects of *our* world do not really belong to it—in itself—but are artificially woven upon impressions. They owe their apparent existence to 'custom' and 'imagination.' They are human and instinctive interpretations of impressions, of the given and real, fashioned ultimately in the interests of action and of life. Knowledge must discount them and terminate in impressions. The result is that the world which is known to be real is a world in which

[1] The Platonic philosophy appears to me, above all, as a struggle between this logical motive and the desire to find lodgment *within* reality, for all the objects of experience, 'to save appearances.'

life and action and experience are impossible. And the world in which alone we can purpose and act is an artificial world—a world of fictitious relations and complexities. Never has this logical motive, the definition of the real as that which is simple rather than complex, absolute rather than relational, substance rather than life and things experienced, led to so final a divorce between the requirements of theory and those of practice. This divorce it was which awoke Kant from his dogmatic slumber and set the problem for a genuinely critical analysis of human experience, untrammelled by this logical presupposition of the old tradition.

There is the other great alternative of metaphysical interpretation to which one would like to give the name 'Idealism.' It is no less 'realistic' than Naturalism. It, too, recognizes the conditioned, historical, and even sporadic character of every experiencing of things—things and structures which cannot be drawn within the processes of experiencing themselves. Things experienced are objective, in spite of, or even because of, their relational complexities, and the meanings—theoretical or practical—which they have within the human perspective.

This interpretation of our human experience lays stress upon certain pervasive traits which characterize experience at all levels, in every mode—non-cognitive as well as cognitive. I shall restrict myself here to a statement of these essential traits as they hold within experience, in so far as it is theoretic and cognitive. There is in every experience something given; but no experience is restricted to, nor does it coincide with, the bare presence of such an immediate datum in such wise that the world is narrowed down to just that datum, within the perspective of that unitary experience. I should reject any theory of knowledge in which the only indubitable elements which we possess wherewith to construct our world and our knowledge are definite data sharply bounded and self-contained in such wise that we are certain with respect to that which falls within its boundaries, and are compelled to resort to precarious inference or 'animal faith' with respect to anything which lies beyond. Neither percepts nor feelings, sense data nor essences, conceived as immediately given entities whose nature is fully disclosed in the experiencing of them, are

the building-stones of the edifice of knowledge or experience. The elements or units of our knowledge exhibit a complexity which transcends any such simplicity. Neither knowledge nor any mode of experience are the loci of pure givenness and immediacy. There is a spread and a depth in all conscious experience of objects which thins down to the bare presence of a datum and nothing besides only at an ideal lower limit, which is the vanishing-point of experience itself.

The transcendence of the given, characteristic of all experience, appears in two different ways, and the relation between these two forms of transcendence constitutes our major metaphysical problem. There are instances in which the given is interpreted and invested with meanings which *appear* to be derived, not from the given nor from anything continuous with the given, but from the structure, interests, and previous experiences of the subject. The subject or self *apperceives* the given in accordance with its own disposition and training. The given supplies only the neutral nucleus, which is invested with various meanings imputed adventitiously to the datum. The criterion as to which interpretation is better or worse, true or false, lies in such cases, not in the nature of any objective world spreading out from the given focus, but in the structure, needs, and interests of the subject. Meanings, relations, classifications, and categories are in this case imposed upon and imputed to the objectively given, which does not own them in its own right. The world *as known*, as ordered and classified, as amenable to the requirements of the human spirit, is the world which has been fashioned out of raw given material (which is alone objective) and subjective forms and vehicles of meaning.

The second kind of transcendence of the given is that in which the elements which yield the means of interpreting the given are supplied from the side of the objective. The given is experienced as incomplete, but that which fills it out and supplements it is continuous with its own nature. The means of interpreting the given are not here, as in the first type, lodged in a self or subject which imposes *its* interpretation upon an external stimulus or material. The 'given' yields its own interpretation, or is capable

of doing so if the proper and adequate medium for that development is provided. The apprehension of space and time, for instance, is neither merely the awareness of data of duration and extensity nor is it the reading into such data of supplementary extensions foreign to their own nature and imposed upon them. It is the awareness and recognition of what the data themselves are, not as immediately given, but as continuously supplementing and completing the given. This supplementing and interpretation of the given comes from the side of the object. Space and time are indeed 'ideal constructions,' but they are not for that reason arbitrary and subjective. The same considerations apply, in principle, to the problem of perception. Objects perceived do not coincide with given sensa, nor with immediately present data of any sort. They are saturated and drenched with meanings which transcend the given. But these meanings are not arbitrarily imputed to sense data. They are completions and supplements of the immediately given material itself, whatever that may be. They are as objective and real as the irrefragible, hard core of the immediately given.

The most familiar instance of a given which carries with it its own completion and interpretation is that of valid inference. Premises—data—impose their own conclusions, which are but their own meanings, supplementing (objectively) the nature of the original data. The process of drawing inferences, of reasoning, —a process occurring only in minds—is throughout constrained by data which are given as incomplete and which sustain and develop themselves. Mind, ideas and reason, are the scene of such objective development. Nor is such objective constraint limited solely to knowledge, to reason in its theoretical function. Right conduct is that conduct which is implied and demanded by the objective situation in which the agent finds himself. Its possibility and achievement rest upon the discovery of the objective meaning which inheres in the given situation. Morality is both an ideal construction and *also* objective, no less so than are perception and inference. The same medium of reason, in which an incomplete given develops its own nature, is present in both instances. In valid inference and in right conduct the con-

straint imposed upon our thinking and our doing is equally objective.

But what becomes, then, of our first type of transcending the given, of interpreting it in accordance with needs and experiences which arise, not from the side of the objectively given, but from the subject, self, or mind? There is here, apparently, the possibility of wider and wider departure from the objective, of the building up of structures which are wholly ideal and subjective, having no counterpart either in the given or in anything continuous with it. If, now, we assume the simplicity and absoluteness of the given and of the real, all ideal constructions, every transcendence of the given in thought, knowledge, and conduct, would indeed be 'ideal' in the sense of subjective and unreal. This assumption has, we have seen, profoundly influenced modern philosophy, and especially the traditional modern conception of mind and consciousness as a detached medium, isolated from all that is objective and real. Such a dualism renders error and illusion explicable and natural, but it renders knowledge correspondingly precarious and dubious. It generates a representative theory of perception, of knowledge and of truth. It yields the belief that the whole of human experience, cognitive no less than practical, is confined to sensations, impressions, and ideas cut off from objective existence. Such ideas may represent or duplicate the objectively real, though such cognitive success or practical solidarity with the real can never itself be experienced or verified.

The resulting problem as I see it is this. To what extent may we say that instances of our first type—the apparently subjective and merely internal elaboration of the given—are in truth cases of the second type, in which contact with something objective is never at any point broken off? Crucial here are the problems of perception and imagery. Are we to say that the content of perception is not objective because it is the result of processes of elaboration and interpretation within a specific perspective of sense organs and previous experience recorded in some way within the brain? Are we also to say that images and ideas are still further removed from the real and the objective because here the attachment to something given or something independent of the subject is still more tenuous? If, indeed, the objective realm is conceived in terms of what is simple and absolute, this is what we shall be compelled to say. Upon such a premise, percepts and images will be driven out of the objective realm and into a detached, subjective area. If, on the other hand, we recognize how unsimple and relational the given and the objective are, the situation may become radically altered. It no longer follows, of necessity, that because the given is always presented within a specific perspective, it is cut off from the objective world and condemned to some sort of unreality. Most promising and sound in principle seem to me the attempts to concede to the content of every perception—secondary as well as primary qualities—a real and objective status. I see no way of cutting across the content of perception, making portions of it objective and relinquishing the remainder to a less real domain. Yet some distinction there is between the worth and adequacy of different perceptions. This implies a criterion. What supplies the standard for the value, cognitive or otherwise, not only of things perceived, but of things experienced in any type or domain of experience? This is the final question. Before stating, in barest outline, in what direction I look for an answer, what of that region of experience, so closely allied to perception yet so apparently far from anything objective—imagery and thought? It is just this continuity with perception and this seeming freedom from constraint by objects which makes the problem of images and ideas so crucial. The one principle which we have here to maintain is this. An image, the content of imaging, may be said to be mental or non-mental. But in any case an image is some real *object* which is imaged. And it *is* the object rather than any subjective or shadowy duplicate of it. Just as a percept or perception is a 'real' object *as perceived*, so an image is an equally real object *as imaged*. The basic consideration in both instances is that of a specific perspective which may *not* be condemned to unreality because it is a perspective, hence relational and complex. And I should say the same thing about a concept, an idea, a theory. Because a theory, a judgment, or an idea is *about* something other than itself, and because the process in which the *existence* of the theory

or judgment is displayed goes on in my body or mind or body-mind, it does not follow that the judgment or idea is a series of events disparate from the objective events to which they refer, and somehow duplicating them or corresponding with them.

If in elementary sensation or perception anything whatever of the organism's environment is known (and if it is not known there is no basis whatever for successful behaviour), then more of that environment may become disclosed in the more complex and more highly developed levels of mind. Memory and idea need not be representative rather than presentative because they are farther removed from their sensory and perceptual foundations. There are dimensions, characteristics, and relational aspects of the real world which can be presented and apprehended only by thought, by judgment and theory. A scientific theory grasps more of the world than any possible sensation or perception, yet its grasp, once consummated, is no less direct.

But is any such thesis as this able, when carried through, to do justice to those motives, those ingredients of experience and thought, which so deeply colour modern life and philosophy? Individualism, subjectivism, activism, responsibility for transforming our world in the light of man's needs and wants, the recognition of ideals and essences not lodged in existence—how can these motives be fitted into a framework of thought in which the controlling factors of mind and experience, ideas and judgment come from objects, from nature, from the world in which mind and experience live—from reality?

That there is here an antinomy it were idle to deny. Experience oscillates between two contrasted attitudes, that of recognizing, discovering, contemplating, and that of making and remaking, controlling and achieving. The relation between these two attitudes, and the two contrasting ways in which the environment enters into them, has always seemed to me the ultimate problem. In my *Idealism and the Modern Age* I tried to assert the primacy of the attitude of *Theoria*, in which the mind is ever—even in its practical intercourse with things—confronted by objective, significant structures, in whose apprehension *all* experience has its being and its life. Nor have I yet broken, in

principle, with this belief. I still think that you cannot describe any of the major provinces of experience without recognizing the controlling influence of objective systems and worlds, constraining thought, feeling and will. Behaviourism and neo-realism are not wholly wrong; but they conceive in too simple a way the nature of those structures which constrain the life of the mind and which give it its filling and its content. The categories neither of physics nor of biology are fully adequate to this task, and their inadequacy springs, at bottom, from this. They interpret mind and experience as the residue of processes from which all objective meaning and value have been removed, as barely factual and causal, mechanical and natural.

Experience is never, I have said, the bare presence of a datum, save, perhaps, at its lower ideal limit where it is on the point of vanishing. Every datum announces itself as incomplete and, in so far, problematic. Corresponding to this characteristic of the datum is the fact that the experiencing, the awareness of the datum, is always more than simple acquiescence in what is given. Mind does more than record the immediately present. Its characteristic act is to claim for the datum a meaning which no datum within its own boundaries possesses. Hence the question of validity arises with respect to every pulse and moment of conscious experience. Given any bit of experience, and you have to ask, not only what it is and what its causal antecedents are, but also what measure of validity does it possess? This holds not only of each item of cognitive experience, perception, concept, and judgment, but of experience as practical and appreciative as well. This constitutes the ideal aspect of experience, 'ideal' in no eulogistic sense, but merely descriptive of this claim-making trait. All that is experienced—perceived, willed, and felt—is amenable, not only to the categories of description and causal explanation, but to normative criteria as well.

This is most simply to be seen in the case of judgment, which I take to be typical. A judgment is an event which occurs. This event has its causal antecedents. So far a judgment is like any natural occurrence whatever. But one has not exhausted all that one wants to know about a judgment when one has thus described

and explained it. One has still to ascertain the degree of validity which it possesses. That some judgments, at least, possess validity is indubitable. The question now is this: Are the factors which are responsible for the existence of the judgment, the situation in nature from which the judgment as an event arises, wholly factual, untainted by meaning and value, entirely *wertfrei*? Three alternative positions are open to us: (1) That which determines a judgment to exist has in it no ingredient of worth at all—judgment is a moment within a series of events which occur at random or mechanically. Nor is any account here to be taken of a subsistent, ideal realm which, while it exercises no constraint upon the *existence* of judgment, yet provides an ideal criterion wherewith to measure its worth. Such a position is naturalistic monism. (2) The *existence* of judgment, as a natural event, is to be understood as before, solely in terms of its causal and 'mechanical' antecedents. But there is also an ideal realm of normative principles which determine a judgment's validity, though they are otiose and inert with respect to its existence. Such a position is that of a radical dualism. It stresses the divorce between psychology and logic, between existence and essence, between fact and norm.

It is difficult for me to see what validity could attach to a judgment upon the premises of naturalistic monism and determinism. Even if the existence of any judgment could be rendered intelligible, its validity in the sense of its truth of falsity would remain an empty word. It would be as meaningless to ascribe truth to a judgment as to the fall of a meteor, if both are wholly the outcome of matter-of-fact occurrences. Nor do I think we are in any better position if we take refuge in a dualism of determining, causal factors and validating grounds, of the sort developed in the neo-Kantian schools. For here, too, the grounds which determine a judgment's validity are kept entirely aloof from the factors which render intelligible the judgment's existence. If a judgment happens to be true, it is through no merit or worth of the situation whence it has emerged.

There is a third alternative. It results from the recognition that the principles which determine the validity of a judgment

are of no avail unless they belong to, and are continuous with, the factors which are responsible for the judgment's existence. The situation out of which the judgment is generated cannot be indifferent to the meaning and worth of the judgment, nor can the grounds of its validity be severed from the agencies which produce it. This implies that in some manner meanings and values are integral to existence and to reality. A judgment, *as an occurrence*, is occasioned by some sort of mind-body mechanism. A judgment *as true* is constrained by logical criteria which serve as a norm. What have these to do with each other? Here is, in miniature, the whole problem of the relation between descriptive and normative, 'is' and 'ought,' facts and ideals, events and their significance and value. The difference between a true and a false judgment (with respect to the occasions which breed them) cannot be that while a false judgment is caused by merely psychological processes, a true judgment is constrained by logical norms which belong to a totally different dimension. The true judgment must equally occur because of the psychological (or biological) mechanism which generates it. That 'mechanism' must be continuous with the structures and processes out of which a true judgment arises. The only principle which I can formulate is this: what we call logical principles are of the same stuff as merely psychological principles, but they are more inclusive, they have a wider range and embody more of the real world. Psychology is more abstract and partial than is logic. They are not hostile, nor do they inhabit incommensurable areas.

The growth of experience and of mind is the development of systems and of structures which incorporate and come under the constraint of more inclusive stretches of reality. This is the story of the history from touch to vision, from percept to concept. The more 'ideal' experience is, the more inclusive is the area of reality which it recognizes and to which it responds. Mind is ever the scene of control by a general scheme, by the outlying, absent and distant, rather than by the immediately surrounding and antecedent particulars. In this sense the order of physical events (as traditionally conceived) is the home of immediacy, or of the constraint, the push and pull of the directly contiguous in space

and time. But even in the physical order of nature such immediacy has proven to be inadequate. How much more inadequate is it in the domains of living structures, of historic achievements and the worlds which are disclosed to and which sustain the career of mind!

Do such statements as these prepare the way for the acceptance of philosophical Absolutism? I do not see, as yet, that they do. An experience to which *all* the wealth of structure and meaning which belong to reality would be fully presented is a contradiction, since the ideal aspect of experience, corresponding to the fragmentary character of everything given and experienced, cannot be thought away. But it need not follow that such ideal meanings are deprived of lodgment in reality because they do not and cannot coincide with 'given' facts. They are not thereby arbitrary human accretions, imposed upon, and imputed to, a neutral and wholly factual, meaningless world.

This, then, is the philosophical framework—or some rafters thereof—the erection and completion of which seems to me most worth while attempting. Yet 'completion' is no term to be applied to a philosophical structure. Every philosophical hypothesis and organized framework of ideas has its surds and problems peculiar to its own genus. Within which type of structure, naturalism or idealism, do such recalcitrant elements plague us the least, when the widest sweep of nature and life, experience and history, are kept steadily in view? This alone can supply the means whereby the success of any philosophical venture is to be tested.

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THE GREAT ART WHICH IS PHILOSOPHY

By HARTLEY BURR ALEXANDER

Born 1873; Professor of Philosophy, Scripps College, California.

THE GREAT ART WHICH IS PHILOSOPHY

I

HAVING but the conviction that philosophy is an art—the Great Art—I can only speak as one for whom the interpretation of this art is worthily the task of a lifetime. In naming philosophy art rather than science I have no notion that I am in any wise detracting from its dignity as a quest for truth, but am adding thereto, for I conceive that I am ascribing to it a range and subtlety of expression such as no science may be found to possess, yet without which all communication of truth must be feeble and mutilated. Historically science is the offspring of philosophy, and is participant with it in the pursuit of understanding; yet science is not a capable heir in the sense in which philosophy inherits power from its own parent, which is the whole of that art whereby mankind has sought, and still seeks, to create intelligible images of the meaning of our human life, upwelling from chaos. Such imaged meanings are truth, and for truth no measures may suffice that employ less than the total resources of our intelligence, which richness of resource is the mark of art, and it is also the mark of philosophy, for where truth is the stake philosophy is of all modes of understanding the subtlest and the most penetrating. Therefore it is first of all with reference to the gift of truth-speaking that I name philosophy an art, although surely it is an art also with respect to its purpose and its wisdom, as I shall maintain.

An illustration which pleases me indicates after this fashion the distinction of science and art. Let one stand at his window and upon the pane etch the outlines of the houses and streets or the gardens and hills there to be seen. Let, then, the pane be removed to become the foundation of a study, in either of two modes. By the appropriate projection it may be made over into a map or plat of the area seen, such that one may comparatively measure the structures indicated and may, indeed, employ the whole design as a chart of locomotions, serving as guide and pathfinder, even though it would in no way resemble

what one might see were he to follow the indicated paths. This, it appears to me, is exactly the method and the achievement of that form of knowledge which we call science; it gives us paths of motion, practical guides, whereby we may proceed with expedition and economy to those places where we wish to be; but why we should wish to go thither or what we are to perceive when we are arrived, these matters our chart does not reveal. And it is just these which are to be indicated by the other mode in which our study may be pursued; for the artist may take the etching as the beginning of a picture, to be filled in with colour and light, and so create for us the similitude of perception in all its living actuality, or perhaps, by his own imaginative corrections, indicate details which we may alter for the sake of gardening our domain more to our taste. Here the end is the moment of contemplation, or indeed of humanization, which we willingly recognize as of itself the satisfaction of our activity and the completion of our understanding. In each of these studies we have begun with an abstraction and have returned to its object with knowledge not previously possessed; but of the two the one has yielded us means and the other reasons, and it is the latter which most resemble the wisdom of philosophy.

Now I find a certain corroboration of the meaning conveyed by this image when I ask after what metaphors most nourish the roots of our expression and best carry the messages of human intelligence. Quite certainly these metaphors cluster about our body, about its parts and its functions and its suffused sensibility of its own growing life; the categories of all logics are to be found in respiration and heartbeat, in the extensions and prehensions of our limbs, in eyesight and ear-hearing, in mouth-speech and gesture-speech, in food-taking and in life-bringing, and in all the metamorphoses which dramatically construe the norm and the sense of the life of man. Such things, without addition conveying from mind to mind the colour and intimacy of whatever is sensitive within us, constitute the priorities of understanding and the root-meanings of discourse, and they establish for us effortlessly a milieu of unchallenged comprehensions which is the possibility of a society of minds and is the beginning of

reason. To realize how structure-giving is this fact one need but reflect upon what difficulties would lie in our coming to an understanding with a mind-endowed octopus or squid, and, indeed, do lie between us and any illuminating communication with even those domestic animals that are most eager for our companionship; or obversely, one might note how among ourselves, when associated by kinds, we acquire a swift-mindedness which puts child at ease with child, youth with youth, elderman with elderman, or gives to men among men, women in the company of women, a conscious relief from the sense of artifice that goes with the conventions whereby we endeavour to facilitate association of the sexes. There are barriers to comprehension even within our human measures of the intelligible.

Of these measures a certain limited set, readily to be characterized, constitute the especial intelligibility of science. Primarily they are skeletal and muscular and locomotive, and assembled they yield us that image of the understood machine which is named by us scientific rationality. Its elements are distinguishable within the body. First, the rigidities of our bones, which give us space. The upright body of man is the gnomon of his circumscribing universe, in its plane foursquare with his right and left and before and behind, in its pole trine with the underfoot nadir, the overhead zenith, and the navel which is the symbolic *pou stō* of his spatial world. Again, the stature of man is our world's metre, analysed by our bones into thumb and palm and foot, into yard and pace (of which the platinum metre itself is no more than the refined generalization), and through the geomancy of our decadic digits subdivided into points and millimetres, or repeated out into *mille passus*, kilometric earth-girth, star-sphere, light-year of space. Second, the flexions of our muscles, which give us motion and thence generate metric time. Each movement is a moment, an event, an accent; and the sequences of our motions throw these into rhythmic cycles, trinal with the movements of our tripartite limbs, dual with those of our bisymmetric bodies, and all underlain with the tempos of eternity given by pulse and breath. Clocks and dials and figurate years mean time only with reference to such measures. Third is number.

Quanta are *res*, things taken, taken first by physical and second by imaginative prehension; and these yield us the initials of mathematics. Metric number joins to fingering only breath-count, to space-unit a time-unit, in order to tell out the whole arithmetic of creation; while the frame of cosmos is bequeathed by the torsions and angulations of our joints, and the dimensions of space are given in the spheroids which circumscribe our axial spine, in the rests and postures which define point and plane, and by the index which adds sense-order to our locomotions. Such quanta and metres are wholly described by the real numbers; where mathematics passes beyond these it moves into the realm of the metaphysical and the ultra-scientific.

Space, time, and number are the ultimates of scientific reason (as nowadays science is understood), but they are themselves abstractions of our skeletal and muscular life—last abstractions if, indeed, we may not have arrived at one farther generalization which is making of space and time the supernumeraries of number, and of number the only cosmos. Yet space, time, and number, after all, are but elements. Of themselves they do not give us the conviction of understanding, which alone can confirm to the functioning machine its sufficiency as reason. To them we must add the unifying trait that to be genuinely a machine is to do something; to them we must add work and force. Our limbs not only move, they push and pull and lift and release; they are mallets and levers and screws; and in their directed motions they are multifariously in contact with a resistant encasement which only effort can shape anew. Most of our active consciousness, and the very root of our conception of activity, lives in our sense of muscular effort; it forms about our expending energies and the fatigues of work, of which the reciprocal is our sense of contactual resistances and recumbancies, generalized first into gravitational weight, and beyond into mechanical mass. It is true that in our more abstracted physics this mass tends to fade out into number (along with time and space), yet even if but as a ghost it lingers on in the polarities alike of the electromagnetic atom and of the hypergalactic universe; and it is only this ghostly reflection of our own puny exertion of effort that

gives convincing reality either to atom or to universe. The machine, then, functioning, working, is genuinely this mechanical body of ours; and whether its forthfigurings be the magnifications of astronomical speculation, the comminutions of atomic systems, or the arcs and nodes of neural patterns, always its reason is the living body, motive and locomotive. In the structures and actions of this living body are the images and logic of all knowledge, which we call, in strict mode, science.

I have but one addition. Surreptitious and unnoted, light also is there. It is a light without colour or focus and it yields no perspectives, but none the less its presence alone is what gives us our imaginative readings of dials and graphs, visualizes our charts of motion, and renders legible those minute punctualities without which the machine could be only blind and blundering power. It gives, too, a morphology of the real and the possible; for where the sight falls, there the world is bounded and possibility ends; and where arm-reach and eyesight confirm their objects for one another, there reality is at its maximum of trustworthiness—these, at least, in the mechanical world. It is true enough that mechanistic science is unconscious of the presence of this colourless illumination, and offers for it no place in its logic; yet without it the machine could be only a chaotic Titan fumbling in the gloom of the abyss. All that truly makes of science a chart and a guide, cartographic for life, is the unrecognized presence of a reader and of a light which in more than a metaphorical sense is the light of reason.

Such are the measures which have created for us scientific intelligence, and which, in shaping the foundation, set also the boundaries of scientific wisdom. But there is another set of metaphors, clinging close to our bodily life, to which science has never allowed more than inadvertent admission into its systems, yet which has yielded us the keenest and most convincing of our understandings. In this set fall all those structural perceptions which are mediated by delicately adjusted sense-organs and are not concerned with locomotion; and in it also fall the organic thrills and responses which weave the pattern of bodily consciousness and fuse into one life the metamorphoses of our years.

One can distinguish this set from that which has given reason to science by calling its metaphors 'secondaries,' whereas the other is the set of 'primaries'; but this is only to repeat the rote of an old theory. It is much better to point out that the so-called 'secondaries' are the character-giving, as distinct from the motion-charting, metaphors of the understanding, and that in place of blurring into continua or reduplicating into automata they yield to us the intelligibilities of art, perhaps most of all of dramatic art. Certainly, as does the reason which gives science, they begin with abstraction, but they do not, like scientific thinking, pursue this initial abstraction into any realm of remote and universal law; rather, their end is an image, and an image having all the vividness and verisimilitude of the foundational experience, only now the experience is shown as significant and as lighted by its own truth. The mode is the mode of art.

Eyesight and ear-hearing are two of the fountains of this æsthetic understanding. Of light I have already said that its unnoted presence is all that rescues science from the chaos of unreason; yet the colourless and diffuse illumination which scientific reason utilizes is but the frail spectre of the full understanding which is eyesight's gift. Conceive what loss were one to expurgate from the world's letters all the meaning that vision and light convey! Not alone would the symbolism of colour vanish, but eloquence would fade from poetry and its glory from every apocalypse. And beyond letters lie painting and sculpture and intelligible form, all giving their interpretations of man's understandings of himself and of nature; and again beyond is the whole spectacle of the world, colour and form and motion combining, throughout seen and named and understood in reflection. For eyesight-seeing, even as to its root metaphors, is very much more than optical sensation. It is absurd to suppose that sense-organs and sensory tracts give an account of sense-perception; actual perception is as much emotion and idea as sense, and it is actual perception that is taken up in the metaphorical reasoning whose expression is art. Light and dark are rich in sentiment, while colour is almost an entire language of the feelings: drab and gay, turgid and lucent, depressing and inspiring, crass and

refined—these are all meanings that are immediate in our colour world, and they are moral and intellectual and emotional meanings as well as significations of sense. It is with such resource that the metaphors of vision put understanding into art and make of the cosmic spectacle one of the pillars of metaphysics. I have often paused in considering the behest of some arch-astronomer, that I join in his admiration of the mechanic stars, to wonder if, indeed, his conviction would be so glorified were the object of his contemplation not celestial luminaries but some vast obscenity opaquing the abyss? Clearly, science itself borrows from art, and æsthetic emotion is one of the stays of its rationality.

If eyesight gives us a space which is vastly richer and truer than any which physics knows, so hearing leads into a time which is more real than any chronometry. The time to which I refer is musical; it is not to be understood in any technical sense, although musical art is its symbol, but it is musical in that broader mode which would make music to include the whole phrase-form of thought and the varied progressions of life, music as that curious discarnation which distinguishes time from space, spirit from matter, and gives to the ideal its unassailable empire over every provincial now. To musical time there is beginning and middle and end, or at least there is melodic direction, irreversible, and the symphonic interplaying of vital themes, which alone can give us some comprehension of the interpenetrations of cosmical times—such that we of to-day, for example, look upon light that may have departed its nebula when earth was carboniferous, or such that past, present, and future gather into one meaning in the conformation of the stars or the structure of a flower. The visible heavens and the world of organic forms are meshes of such temporal interpenetrations, but so also are our lives, with infancy and youth and our whole mind-echoed past and mind-foreseen future living within us, to be, in the one true sense, time.

Thus space and time have æsthetic modes richer in wisdom than ever can be the pale formularies of the space and time which physical science knows. Doubtless, also, there is an æsthetic of number which is more than formulary, and is metric in another

than any quantitative sense. Such we find at hand wherever number shapes itself into structures and systems, wherever numbers are architectural or architectonic. Odd and even is surely an example; so also such descriptions as triadic, quinary, decimal, or, if one choose, surd and rational and transcendental. These are but simple types of numeral characters that in physical nature represent only accidents, but in mathematics create art; they do not originate with quantity nor are they employed for any primitive measure, and if they are subject to formula they are themselves underived. Mathematical perfection belongs to the ideas which numbers are rather than to physical things, and all appreciation of perfection is æsthetic. When Pythagoras, having discovered the theorem of the three squares, sacrificed an ox to Zeus, his devotion was that of an artist, not of a surveyor.

Contributory to this æsthetic of number (as likewise it is contributory to the æsthetic of musical time) is the rhythm of motion. For just as scientific reason utilizes light and sight without exhausting the significance of vision, so of motion the fuller meaning is abandoned to art. Our limbs are not only trinal, they are dactyllic and anapæstic; our bodies are not only duomotor, they are iambic, trochaic, spondaic; and the combinations, diminuendos, and crescendos of these units yield that infinite poetry of pattern which is the dance of life and the movement of reason, whether logos or arithmos. Whoever has heard the insistent drum-beat taming wild men to its rhythms can understand, at least in spirit, both the music of the spheres and the transcendentalities of the mathematicians.

Reason, then, for art is in all its elements a more significant thing than is reason for science; and as this is true with respect to the elements, so also is it true with respect to the principle of sufficiency. For the finality of æsthetic rationality is a much more intimate thing even than light, and a more subtle and a more intelligible, being, in fact, no less than the life-form of the body itself, the Vita of man. Within the Vita are included the elemental functions of bodily existence—food-taking, for example, which is the most universally communicable of all meanings and gives us our first and surest comprehensions of the mouthing and

chap-licking world of our animal comrades. Certainly, tongue and tooth and breast and heart are the very thrones of metaphor; it is these that form prime categories of reasoning and the last kennings of poetry; for through these and their kindred terms are conveyed, not only the simple modes of physical life, such as breath and nourishment, birth and death, but also, and with more intensity, the whole range of values which inspire our world with meaning: its glut and emptiness, courage and recoil, the gamut of love and the discords of hate, or again that sympathy and antipathy with which a Greek would give centre and periphery to his moving sphere, or which lingers on in our own ghost-haunted physics as attraction and repulsion, polarity, chemotropy. All such values are conveyed as the first intentions of the metaphors of the Vita; but second intentions are present also, and these penetrate even more deeply into metaphysical understanding. Among them none is more searching than is the image of metamorphosis. For within our lives each living moment leaps flame-like, illuminating past and future, so that we know the bodily Vita as one arc of being, bounded by birth and death and defined by its cycle of metamorphic change. The movement is that of transformation, but the outline is the outline of drama, wherein falls all that play of meaning through which the spectacle given in æsthetic space, the music which is the order of æsthetic time, and the modalities of rhythmic numbers shape the significance of our worlds. And so far as we men can discover it, the full reasonableness of Nature is just such a drama; it is the Vita Mundi, of which the measures cannot be less than the height of complexity that we may discover in our own lives.

Therefore I say that philosophy, which is the quest of wisdom and of wisdom's truth, is an art, and the Great Art, seeking its finalities, not in some unoccupied scaffolding of jointed generalizations, standardized for the trade, but in the self-understandings of a spirit that knows itself commanded by the god to make music, and having for its instrument a mind multifariously endowed. Such a philosophy will start with the miracle which each man knows himself to be and knows his world to be; it will begin in wonder, and it will be content with no conclusion which

does not return to the philosopher an image as instant and vivid as is his own life. Its measures will be man's own complexities, the fullness of the Vita Humana, and it will regard with incomprehension that curious attempt, characteristic of the methods of the science called empirical, to build up complex things out of simplicities, knowing that the fate of such an attempt can never be anything but lost wanderings into the wilderness of destitute and unattached abstractions. Hypothesis, it is true, can give us some image of our world as one among the possible worlds, but that ours is just this world from among all those, and that I am just this man in the now and here of this life—this is a miracle which hypothesis can never entertain, and which only art can familiarize with reason. Nay, hypothesis itself can have no meaning except as directed to the future, and that a living future; there are no hypothetical pasts in a direction-made temporal world; life knows no possibilities save in what is to be. Therefore we shall define reality, not as some anatomized existent, but as the significant; and the only form of significance which we shall know is that which shall invest the miracle with the habiliment of our familiar life and make of it our parable. Truth *is* just this parable, and to discover truth is the Great Art.

II

Owning such a conception of philosophy as I have sketched, holding it to be more art than science, and an art in which the pattern of highest significance is the whole Vita of Man, there can be no misplacement of emphasis when I assert that philosophy is biographical in its mode, and in its method autobiographical. Biographical, too, I would say, of more than the thinker's moments, for every thinker and every thought is set, not in a point, but in a direction that is significant, tangential to the curve of life, and it is the nature of thought to define direction rather than situation; philosophy, therefore, is biographical of an age and of a civilization, in so far as these have discoverable patterns, and it is biographical of the world, also, for the life that each man lives is inseparably the world's life. And the

philosopher, in his own biography, must necessarily discover the clues to whatever wisdom is to be his. I do not mean that he will examine with indifferent zest each and every leap and sting of experience, or that he will assemble the accidents of his days in some muddied reflection of the whole; but I do mean that whatever truth he finds must be in the nature of a self-discovery, some illumination of the alien by the familiar, intimately revealed. His perception of order may extend no farther than to images given by his bones and muscles in mechanic movement, ghost-haunted; it may grope helplessly within the twilights of personal and hapless things; it may, again, move spiritedly out, mind-winged, into understandings that reconstrue the life that book-learning makes possible as an expansion of his own; or it may open into clarities of theory that read in the hieroglyphics of nature the flown vitalities of the past or the auspices of a generative future. But in each case what the man's life is, what his powers are, in these are set the measures of his world.

Common to mankind is some myth of the Emergence. Self-discovery is unpremised; birth is without antecedents; each life is its own miracle—and the world's life, we suppose, must be its miracle, too. To be sure, after having lived awhile, we begin to recount memories; we speak mythically of anamnesis and metempsychosis, or with much service of calculation we assort heredities into genealogical traits whose marriages and adventurous unions have evoked us gradually from some Empedoclean flux, some chaos of monstrosities in which alone, we fondly suppose, could have been our anticipation. But when, abandoning tales, we come home to life, then our single assurance is that the goddess Matuta first created light. The curtain is raised; the stage, puzzlingly, is set. At the outset all the conversation is in the middle voice, and hauntedly in the aorist; but as the action progresses, the grammar takes on tense and structure; persons are distinguished; and the protagonist, who is to be the philosopher's self, discovers himself with the whole meaning of the drama for his rôle. It is in this fashion that life emerges and philosophy is born.

For myself, from early childhood and from out the oblivions

which lie beyond memory, I have been beset with the consciousness that things and moments are but the hieroglyphs of reality, that physical nature is tell-tale with scars (geology became my passion), and that metaphysical nature, if it be not void, must be spiritual in the one sense in which spirit may have meaning, and that is as an engrossment of values—which for me, from the first, included horrors along with beatitudes. For all this I needed no teaching; indeed, it could not be taught. The solitudes of childhood are incommunicably remote—tears and laughters alike incalculable—but this, at least, is their commonplace, that every unsayable perception is a message-bringer and a banner militant with meaning: all the *heres* are portals and all the *nows* dramatic vistas. This is the particularism of 'just this world,' which is the only world that childhood knows and the only world that can ever be real; it is a particularism in which all the objects are symbols, 'play-things' in a literal sense, not dead counters of abstractive commodities, but personal opportunities magical with promise. In so far as I have been able to penetrate the mind called primitive I find that there also this same symbolic particularism is the commonplace of life; nature for the fresh intelligence is wit-challenging heraldry, blazoned with local bearings, not some vast fortification to be breached and mined by the slow campaigns of theory. And if we ourselves will but lay aside the garment of our sophistication, we shall perceive that within our own lives the sense of symbolism is the nude actuality. As to myself, certainly, I cannot find that conviction of the symbolic character of the perceptual or of the vital moment has any origin or source; it is, and has been, omnipresent in the occurrence of such moments. Therefore, for me, no set of mechanic points can combine into the metaphysical image.

On the other hand, I concede no absence of a concern for structure. The allurement of universals is earlier even than the magic of numbers, taking childish form in dramatic rotes and in the airy pretence of mimetic play. The idea of a world, stellar and moral, was one of my excitements before books gave it form; and I was already in sport dubbed 'the philosopher' when what appeared to my elders to be danger lurking in my speculative

curiosity led to the forbidding of certain books (Swedenborg among them), to admonitions and prayers, and on my part, after a certain bitterness of undeception, to a concentrated privacy as to things of the mind, maintained throughout the more growing years of youth. For mine is, I think, the second of the generations which are experiencing between parent and child the hostility of incomprehension, where the issue is the world of the spirit. For me, as for many another, the forms of religion fell broken, and it is only after the estrangement of a lifetime that I am beginning to read back into them a meaning not less richly symbolic than in those days was evoked by the fascinations of the new naturalism. Yet religion itself is far other than a set of forms; and he who would shape within his life its philosophy cannot, if he would, ignore what his experiences of religion (grateful or adverse) have made vitally his.

Three things I can distinctly see, traits now of my thought, the understanding of which was surely facilitated by an early background of religion. The first of these I can hardly better describe than as the intensified perception of the symbolic moments of life. Our Protestant stress upon the profound significance of 'inner experience' is surely just this; and while the thing itself antedates and survives religious imagery—being but the clarified appreciation of the double intentions that give us a world in giving us sense—nevertheless the images of religion make conscious their double intentions from the very nature of the truths they would convey. In this particular Protestantism is a more effective teacher than the ritual Church, for Protestantism relies almost desperately upon intuition for its understanding; so that one reared under its guidance, even while rejecting its particular parables, will none the less not escape his own discovery that the parable alone is the vehicle of communicable life. It all amounts, I suppose, to saying that religion is a form of evocation of our native idealism.

But with this comes a second and not less significant self-discovery. Values are the unmetred realities of things, out of time, out of space; and it is precisely value that is emphasized as 'inner experience'; any extension of a physical fact into a

meaning is such an experience, and all perception of cosmos is in essence evaluation. No religion has ever more emphasized this than has Christianity, holding with a kind of implacable integrity to the good and evil, fair and foul, true and false of its dualisms. For my own part its findings are frankly verified in my life. I see nothing that is indifferent, except chaos, and nothing that can be called true that is not either good or bad in its honest essence. Therefore I have schooled myself to face even shudderingly the black realities of cruelty and bestiality and senseless monstrosity and pitiful affliction and the leprous destruction of innocence and beauty; I have looked down into the reek of hell as well as upwards towards the Bow of Promise; and I have refused to praise God or to idolize Nature for the presence in their world of what I abhor. I believe this to be Christian truth, though it is perhaps beyond the pale of accredited theology. Certainly it is taught by the Drama, which is so vastly more convincing than any dogma can be; but even if the Drama were peculiarly *my* image of its revelation, still I should believe it to be the truth. Dualism is the old name for this belief, and metaphysically dualism means war at the core of being. I assent to this.

The third trait is not unrelated to the symbolism and the dualism which I am describing, being, as it were, their temporal exegesis. It is the sharp sense of the reality of history and of possibility with the constructed past and the destined future seen as the perspective shifts of intelligible truth. As in no other images of human thought Biblical literature portrays the past as a brooding and the future as an inspiring presence, the one a retrospect, the other an omen, but both immanent in the symbolic now—lightnings of the Lord bridging the abysses of before and after with a single flare. To me nothing seems more difficult than the linear notion of time, as if its infinities could be cut into finite strands or the thread of it sheared into oblivions. Living time is totally different from this, with multitudinous interpenetrations, like the combinations of duples and triples in musical rhythms or like the possession within a single architectural perception of plane and perspective and empathetic

spaces. As our own bodies figure it, time is always fulfilled, memory and anticipation as vividly its substance as can be sense; and, indeed, ourselves moving are more keenly aware of recession and advance than of any station. Historic sense is no more than the recognition of the reality of such time beyond the border lines of our bodily being, yet at the same time not beyond the confines of personal significance. History elevates the fact into a symbol, the material into a spiritual reality, which becomes the more capable in proportion to the tenuity of its bodily hold. Greek consciousness cast this sense into the mode of tragedy—conceived not as gloom but as the life of drama; Christian faith has named it the indwelling of the Eternal; but in each description is indicated the serious truth that man's and the world's past and future are caught in the imaging present, and that only the most laden image can assess cosmic reality.

With this avowal I presume that I should accept the name of idealist, yet I must draw back from assuming it in any but a Platonic sense. For while I am convinced that the Vita of the body is bodily reality, and the Vita of human cultures is man's reality, and the Vita of all nature is the world's reality; and while I cannot but perceive that these realities are significantly involved, the one in the other, nevertheless I am still unable to evade the old perception of conflicting and broken and unfulfilled lives; and the certainty of these makes it impossible for me to discover as the heart of all some triumphant or playful One, master of the legerdemain of appearance, giver of the prizes of consolation. The grandiosities of stellar and organic evolution, when they seemed to be sweeping my generation into skies of elation, were for me hollow and reasonless; for I could see in the pictured progress, not one single imperious course, but only stumblings and gropings and blind explorations, pursued always in the shadow of imminent disaster. I should not have been a man of my time had naturalism not fascinated me; but neither should I have been true to the forms of understanding grained into my own life had I found in it either rest or reason. My truth lay elsewhere, and after the first flush of youthful curiosity its pages fell unillumining.

Whence illumination did seem to come was from the minds of men who directed their gaze, not to mechanic chance, but to the miracle of human intelligence. The distance from earth to sky is the measure, not of the stature of the Titan, but of Homer himself, says Longinus; and my own query ran, Who would study an amoeba when he might be studying the mind of Socrates? Greek philosophy, at its height, proclaimed the humanism first of reason and second of whatever is the parent of reason in this mind-gifted world: that, at least, I could see, and seeing it know that truth has no existence save in the white light of humane understanding—of imagination and of sympathy and of perception of good and evil; the moral fact is fundamental metaphysically, for it is the only fact that has meaning. If I saw, too, that the expression of truth must always at the last be in the language of myth, I owe something of this surely to Plato, though most, I venture, to that besetting conviction, with me up from infancy and confirmed by every significant moment of living, that the blaze of sense and the leap of emotion and the wrack of physical pain—all that springs focal into the nows and heres—is but the fiery hand inscribing the meaning of the world.

From another source came confirmation. Greek philosophy, sober, attempered, clean within its measures, set the model of self-controlled intelligence. Logic, we have come to call it, and reason and theory and wisdom; and it is the shaper of all of these in Occidental thought. But there are other shapes in which intelligence has been begot, and I have studied how the centuries have seasoned in the minds of another race of men, the ancient natives of America, a symbolic wisdom which imparts with symbols the Platonic and Christian understanding that nature is an image, that creation is groping and experimental, that human life is an ordeal with virtues for its flags and ensigns, and that some sense-transcending beauty is its only, but sufficient, glory. Remote from one another in time and tribe, men come to this one sanity, which having found they make over into a heraldry and a rite, and this they call their humanity.

Or, indeed, their God. For my third illumination is to look again at history and at hope, and to see the surge of human

culture achieving race after race and period upon period its rituals of civilization in each of which some image of intelligible life takes on the form of letters and art and wisdom, collectively our treasure and in honour our enterprise. As an art of discourse philosophy is a Greek thing, and beautiful with intellect; but as the Great Art it is more than Greek and more than intellectual: it is æsthetic and religious, and it is a maker of the music for which even Socrates feared God's question, and despair of which was Dante's swoon from Paradise. The great fact of human history is its resurgent quest of the Good Life, to be the measure of the Good World and the Good God. And this is the metric truth of reality also, beside which the infinities of trans-stellar spaces and the infinitesimals of material atomies are as children's thumbsticks; for of this we can be convinced, that not less than the full span, not alone of man's achievement, but of his dream, must be his measure of the Vita Mundi.

Should you ask me if even this can be sufficient, I shall deny it. For who am I that I should know God? And who are all men and all lives that they should know Him? The circuit of my life is brief, and the circuit of my understandings is but its fraction. About me are many other lives, and some I guess dimly and most not at all; yet within each is its waste of perplexity and its islet of understanding, and only a feeble beacon is its communicable meaning. No, the deeps of being are not to be charted by the lanterns, few and intermittent, that mark the frail coasts of human understandings, and the sum of all lights that men have found them is as a spark, kindled to fail. Only arrogance or fatuity could make of man's life, or of man's life conjoined with all the varied lives of the animals, existent and extinct, or of these and together with them the unguessed life that is in dumb things—could make of these combined that which should plumb the Life of the World, or discover a metaphysics which should abolish mystery.

Nevertheless should you ask me what is precious in our natures I shall answer that it is this same spark of understanding. It is a frail thing, and it may be a vanishing; but it is our reality, and it is our participance in the world's meaning. I think, too,

that it is something more even than this: it is our intimacy with God, and token of our love of him—for God, though he be but a lamp uplifted over chaos, I hold to be the Truth-bearer, and our love of him is our yearning after truth's illumination. Love of him also is the zest of life, when the search for truth is his service. In our day earth's measures have been fully taken, pole to pole, ocean deep to mountain height, and we know our bodily domain; and in our day, too, the measures of physical nature, in all its proportionality to our bodily stature and structure, have at least been brought within the purview of their completed record, the sciences equipped and their tasks assigned. No such momentous happenings have ever before in human affairs been brought to near completion; mankind has passed its youth and is facing its majority. And throughout the world is a wistfulness and unrest, where men are seeking a compensation for the flown joy and high elations of their physical adventure, which if it come will surely be in another than the physical dimensions either of geography or of science, and will surely take form in soundings of the possibilities that are within us of a new and more spiritual intelligence, and will shape out of maturer lives yet more penetrating images of wisdom.

III

Have I made clear the contour of a metaphysics? It could, I suppose, be distorted into propositions, more or less indicative of my meaning. Which would be: first, that the image of the machine and the physics which it has created represents little more than the fleshless bones of a world, articulate, macabresque. And second, that metaphysics which represents all that can be discovered by more than metric number can give no better definition of the real than that it is the significant. And third, that never the simplicities but only the height of the complexities of life can describe significance and represent truth, and that understanding proceeds always from the greater unit to the less, from intuition to analysis. And for a fourth, that life yields in the pattern of its own Vita—time and destiny imaged in one

being—our securest and fullest depiction; and that within that Vita better and worse are alike real and are implacably inimical. With these propositions I should have intimated my theory of knowledge and have arrived at a position where I could go on with its implications as to nature and to human nature and to divine nature. And of nature I should say that it is only mistily shown to us as a being hovering ever upon the margins of chaos, a spectre out of the deep. And of human nature that it is a militant thing, hero-creating and devil-pursued, faithful and pugnacious and haunted, capable of ineffable loves and unspeakable torments, and gifted with a genius of artistic understanding. While of the nature which is divine I can only add, with Plato, that what the sun is to the eye and light to seeing, such is the Image of the Good and the countenance of God. Nor is this merely a figure, for I have already proclaimed that only in the language of parable can men and the races of men communicate to one another the findings of their lives.

But philosophy is a poor thing if it end its task with a proposition, and above all ignoble would be such an end of a philosophy which makes of life its image. For within life imperatives are as naked blades forbidding soft repose; it is for the mechanic men, caught by hypnotic glitters, wheel and shaft, to surrender to make-naught speculation—strange Nemesis of a philosophy which founds reason upon motion! None who recognizes good and evil as metaphysical and real can deem just any name of wisdom which bespeaks the relinquishment of fealty to the good or of war upon the evil; our highest grace is that we may love nobility and beauty and serve them, and that we may confess shame of what is ugly and base and rejoice to destroy them. Let us repeat it, out of the past: that philosophy is vain by which no man's life is illumined.

For myself, therefore, speaking as one living and as comrade of the living and as teacher, I profess that philosophy is a way of life which, whether or not mine own way be as any other's, is still a deed done in this world, and one among its measures. I and my thought may be of infinitesimal significance, but as a life lived my thinking self is an irreducible certainty, with which

the truth of the universe can never be incommensurate. There may be, I own, numberless lost worlds separated by gaps unbridged by any measure, and numberless lives that are only guideless lanterns vanishing in the black. And it may be that my world and my life are among these. Nevertheless what it is that am I; and its truth must be my faith.

The command of this truth has ever been that I build, becoming after my fashion an architect and uprearing my city over the hill Utopia. Its foundations are fathomless and its skies are fathomless, but the place itself is illumined, for I have sworn that there shall be set therein no stone without measure and substance and no house without humanity and no temple without its shrine to beauty—and these are the lamps that give it light. It is fortified with a wall which I call reason, but I know well that beyond the wall it is girt about with unreason and a great night, incommunicable, though once and again there is tossed up out of the night a thing formed or a broken inscription or a far voice carrying a music across the waste, and I guess that other cities have been and are on many a Utopia. This is my faith; so I turn back into mine own town and build with a better heart. There I erect the seats of my Areopagites and enthrone upon them Courage and Temperance and Justice and Magnanimity and all the greatnesses of things human, before whom come the gods to plead their own causes and to be adjudged by men; and it is they who take their fates, whether they are to live or not, from the minds of mortals. And within my city also I design a freemen's Agora, to be an assembly-place and a market, where stout merchants bring shrewd common sense and rich observations out of other times and lives, and youths from their gymnasia enter to enliven the place with skills and humours and the graces of fancy, and philosophers come to discourse gravely of the affairs of State, and rhapsodes and musicians sing of heroes and loves and of all things glorious to man. But the loftiest place in my city is Acropolis, holding within its precinct the treasury and the principal temple. The treasure within the treasury is writings; there are found book-writings and writings of metal and of marble and of musical sound and of all wherewith men have

shaped and inscribed their thoughts, and there also are the writings of nature, some in stone and some in star-dust and some in the spoors of the life that was before man's and in the sign-language of the life that is companionable with his. But before the door of the treasury stands the form of the goddess of Wisdom, for she alone can be the oracle of all that is written. Moreover, there are ascents that lead yet higher. There, upon the steps of the temple, at sport with laughing children, I behold one who had been disdainful of a deity, and though I perceive that he has understood tears, yet his face is shining with the smile that children love. And upon the stylobate are raised altars to noble minds, and these I recognize by the tokens that are over them: here is a cock and an image of Asclepias, and here is inscribed 'Remember the children of Metrodorus,' and upon another is lettered a sermon that was preached to the birds, and upon yet another, beneath an upright and inextinguishable flame, is deep engraved 'Yet more to be feared is Truth'—these there are and many more. But within the temple, which is named by me the Temple of the Pattern Man, there is only a wooden emblem, simple and geometrical.

Very likely it is due to the fact that I am a man of the Occident and a man of this day and hour that my image of what is beautiful and divine in the Vita Humana should be just this that it is. A boy at work with his carpenter's tools, amid the fragrance of seasoning wood; a young man eager about the souls of fisherfolk; a teacher quite simple in his certainty that the parable only can convey wisdom; tenderness toward babes, a whimsy for wild flowers, sunniness and gentle gaiety, but black wrath, too, against lies and cheats. To me life has not given his confidence, so superbly serene save for one torture-made moment, in the protective vigilance and sustaining power of an Allfather. But when, nakedly self-confessing, I ask myself what is most lovely in our human being, I do not find that supreme loveliness in other qualities than his; and these I can acknowledge as measures, though it be but to show me my own abasement. Moreover, when I watch at my accustomed post, which is far out on the rampart, full-conscious of the gulfs of chaos, my courage is little from myself, but

much from the sign upreared on a hill loftier than Acropolis, where through suffering came not the wisdom of the Greeks but the Hope of all mankind.

Answer it! This fact, also: that the World which breeds bone and muscle and bodily motion to be the metres of its brute dimension, likewise creates love of beauty and nobility and the hope of life, and in spiritual wisdom discovers its embodied realities!

I have expressed myself in images which are not of the schools. Nor, I think, are my meanings greatly those of the schoolmen of mine or of another generation, though as I read their works I seem to see in them also imagists and poets and the makers of an art, which is surely to their fame, and a proof of what I am desirous of saying: that only as thought is established with thought is there structure and only as mind speaks to mind is a world evoked. Living, then, as mind is living, must be all that of which any can say that it exists or that it is truth or that it is real. And each such saying can only be by a lifting into eminence of some vicarious moment of life, chosen from among the many to bear the meaning of the many. Such living moments are images, images incarnate and vestured with reality. Therefore, with the more confidence and the higher hope, I send forth my own image-adventurers, asking that their destiny be a living understanding in comrade minds. For the World, also, is an image, whose other name is Life.

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PHILOSOPHY AND ITS HISTORY

By A. C. ARMSTRONG

Born 1860; Professor of Philosophy in Wesleyan University, Middletown, Connecticut.

PHILOSOPHY AND ITS HISTORY

THE influences that have moulded an intellectual history are not always recoverable by the subject of that history. It becomes difficult, therefore, to comply with the request of the Committee to set forth "the psychological causes as well as the logical reasons" for philosophical conclusions. In the present instance the writer finds it quite impossible to identify the primary source of his abiding interest in the history of opinion. A like devotion to the historical point of view has been shared by others of his group—graduate students and young *Docenten*—in the university and professional school. But they also are unable to explain the origin of their preference. In the teaching of the place and time there was little to awaken interest in historical study in any field of inquiry. Was the impulse then due to the influence of that factor in thought—intangible, yet most real—which is called "the spirit of the time"? If this was the case, through what channels, by what means did the time-spirit exert its influence on scholars beginning their intellectual careers? For themselves the question remains without an answer, although they realize the fact to be explained.

He who expresses a preference for the historical approach to the problems of philosophy may reasonably be expected to define the sense in which the phrase is used. Certain interpretations may be excluded from the start. In the ebb-tide of speculative endeavour in the second and third quarters of the century gone, not a few, despairing of the issue, substituted the records of philosophical opinion for philosophy itself. Even then more courageous, if it should not be rather said profounder thinkers felt able to prophesy the reflux as sure to come, although it was not revealed to them all that the empirical forms of inquiry, in whose name philosophy was discarding, would by their own achievements motive the re-establishment of thought. A second type of historical investigation aims at the formulation of exact interpretations of the systems of the past. This—"philological"—history has its evident value in itself and as a basis for constructive effort. But if it is taken as the only form and goal of

historical philosophy, it too is marked by a lack of content which narrowly restricts its value. Nor is the opposite extreme, tempting though it may be, defensible in the face of experience and critical analysis. The theory that the actual evolution of philosophy reproduces its logical articulation, that the historical process is identical with the rational development and represents *den Gang der sache selbst*, gave a powerful impetus to historical reflection and promoted much fruitful inquiry. Construed, however, in the literal sense, it cannot stand examination, and, like the analyses which it contradicts, it must be relegated to the category of rejected views.

In contrast to such interpretations, the history of philosophy may be conceived in a different way. This method is grounded in exact investigation, but it does not end with the establishment of historical data. Nor does it offer its results as a substitute for reasoned conclusions, although it recognizes the singular importance of its history for a discipline in which the area of demonstrative inference is so restricted, where so much remains matter of opinion, and wherein, for some at least, systematic construction presents so difficult a task. In the other direction, this view stops short of the interpretation of philosophical history as an *a priori* form of speculative activity: it conceives it rather as engaged in tracing out the origin, the affiliation, and the evolution of philosophical ideas. So history becomes an instrument of constructive endeavour, although it cannot supply the latter's place. It furnishes one of the most useful types of philosophical propædeutic. It registers the classical alternatives of thought as these have been wrought out by the masters of philosophical reflection. And to this advantage it adds a kindred benefit, as it guards against the revival of outworn theories or the repetition of discussions from the past. To the historian, for example, recent debates concerning biological evolution in its bearing on ethics and religion often sound like echoes of the years when Darwinism had just broken on the notice of the world. At times fundamentalists and naturalists alike approach the problem from the point of view of Wilberforce or Huxley, forgetful, as it seems, of the work of reflection which has been accomplished

since 1859 or 1860. And "emergent evolution" is not of itself free from similar dangers. As it was found necessary in the appraisal of the earlier doctrine, so in the interpretation of the new, there will be need to distinguish between the natural laws of the phenomenal order and principles of speculative interpretation, to avoid the uncritical identification of "evolution" and "development," to question the confusion of genesis with nature and value, no less than to consider the data from which ultimate explanations must take their departure.

Historical philosophy makes further contribution still to philosophical progress as well as to its interpretation and to the understanding of the action and reaction between philosophy and general thought and culture. In particular, it brings out the rhythms of reflection, now in connection with specific forms of opinion, now as it considers the ebb and flow of thought in the movement of an era. If we return to the theory of evolution for a moment, who can overlook the analogy with other instances in which an outstanding discovery or principle has dominated the thinking of an age? The significance of evolution, like its validity, cannot reasonably be questioned. But when note is taken of its universal, at times uncritical application to problems of every type, or when it is commended as the unique principle of all explanation, the historical student is reminded of similar phenomena in other periods: the prominence, for example, of mathematics and astronomy in early modern times and the endeavour to make the mathematical method the organon of philosophy proper, or at least to approximate the two. Among rhythms of a broader scope, the movements of transition which close a period of construction and precede a second age have especial interest and meaning.[1] These movements involve not philosophy alone, nor even the activity of thought considered in its wider reaches: they affect individual and social living and the institutions on which these depend, as in themselves they are in no small part conditioned by the course of events at large. They display, moreover, regularities of development—negative and positive—which by some have been denominated laws, although,

[1] Cf. the writer's *Transitional Eras in Thought*, New York, 1904.

if it is used at all, the term must be understood in a looser and less definite sense than that which it bears in the sciences of physical nature. Thus the study of their history throws light on the problems of philosophical construction, especially for those reflective thinkers who, like men to-day, live in an age which is disturbed by many of the tendencies which are typical of eras of transition. The historian, indeed, will learn lessons of humility as well as gain suggestions for constructive work. He will find it impossible to ignore the difficulty for any thinker of making a just appraisal of the age in which he lives or the movements in which he takes a part. On the other hand, the sense of limitation will have a certain negative value, for he will be less inclined, or he should be less inclined, than those who neglect historical conclusions to indulge in unreasonable prophecies or exaggerated estimates of progress. More than these he will hesitate to proclaim the coming of a "new age," as, with a recent distinguished historian of modern philosophy, he recognizes the truth that "the advent of a new historical era is not accompanied by an audible click like the beginning of a new piece on a music-box, but is gradually effected."

Appreciation of the history of opinion, therefore, implies no exaggeration of its significance. And, as it has been remarked above, there were few incitements in the early training of the writer to historical reflection. The first introduction to philosophy was framed in terms of Scottish intuitionalism, conceived essentially in accordance with the formulation which had been given it by Reid. The dogmatic limitations of the doctrine were happily compensated by other factors: by the keen insight and broad outlook of the Master, by his regard for concrete fact and productive principles, at times even when the latter differed from his own, by his genuine interest in inductive science, fostered, perchance, by the "empirical rationalism" of his school. This final tendency was of notable advantage to his pupils in philosophy at the time. It cleared the way in general for the recognition of the close connection between philosophy and the particular sciences, and of its dependence on these for a large part of its initial data. In special, biological evolution had recently been

established, the "new," "physiological and experimental" psychology was coming to America from Wundt's laboratory across the sea. It was a boon to the student to be spared the controversy over "science and religion," or "Darwinism and theology," although there was never a shadow of doubt concerning the positive character of the Master's own beliefs. And pupil after pupil was prepared to move forward to the newer psychological positions without hindrance from his training in the introspective method or the conviction which he carried with him from his student days of the reality and uniqueness of the mental life.

Intuitionalism of the type described included a realistic theory of perception, "natural realism," as the doctrine then was called, "direct" or "immediate realism," as it might be termed to-day. This was a function of the Master's insistence on positive conclusions, which was welcome to the pupil at the time, and for which he continues grateful, albeit later reflection has compelled divergence from many of the views that were then commended for acceptance. In the matter of realism, the physics and physiology of sense-perception, when more adequately studied, as well as the analyses of the epistemologists, render it singularly difficult to adhere to the theory in its "natural" or "immediate" form. Many of the distinctions which have been invoked in its support—the distinction between "original" and "acquired perceptions," that between "primary" and "secondary qualities," and the like—crumble before the test of critical examination or prove to be of relative, rather than of absolute significance. Concepts which the realist employs—substance, for one notable example—fare badly when they are tried by noëtical investigation, and this whether they are postulated by realists of the earlier or of recent schools. If realism, then, is to be retained and immediate realism has to be abandoned, the way is indicated toward a critical interpretation of the principle. This path has in essence been followed by the writer, under the influence especially of the modern epistemologists, in the event and markedly under the influence of Lotze. The result, it should be added, is not the same as the theory which has been advanced by the group of distinguished thinkers who term their view "critical

realism" in the present and restricted meaning of the phrase. For the subtlety of the doctrine of "essence" can hardly be said to make good its deficiency in point of explanatory force or to mask its position of unstable equipoise between the two theories, immediacy and representationism, which it seeks to replace. In contrast to critical realism of this most recent type, the position which is here advocated may be termed symbolic realism or symbolism, the term being used to describe the relation of correspondence between perception and its objects. This interpretation is not believed to be complete or final, but is accepted as the best attainable in the present state of knowledge and opinion. It is possible that some day some Columbus of the mind will ground the solution of the epistemological problem by the discovery of some utterly simple, yet entirely successful principle of explanation. Meanwhile, it is necessary to be content with tentative and partial views. Among these critical or symbolic realism is held to be the best.

Critical or symbolic realism, once more, is broader than the earlier natural realism or, if the description be preferred, less inclusive in its content. The latter doctrine included a dualistic metaphysic. The former refrains from prejudging the nature of the objects of perception, or at least it reaches no formal answer to the question concerning it. The close interconnection of the question of knowledge and the question of the nature of the object is not denied; it is realized rather (and again with Lotze) that action and reaction between the two problems is so close and constant that it is impossible to discuss them in isolation. All that is intended is the freeing of the doctrine of perception from dependence on a fixed theory of the object and recognition of the fact that it is compatible with different theories. In another direction, the view adopted more nearly approximates the older principle. Many later thinkers tacitly restrict the inquiry to man's knowledge of a single class of objects, to "things" or the spatial objects which are perceived through the functioning of the bodily senses. This appears to be a view too narrowly limited. In addition to the objects which we call things, there are the mental objects of self-conscious reflection and the "social objects"

—as they may be termed for lack of a better name—which are functions or results of the collective and institutional life of men, and for the most part, also, in essence mental. The restriction is the more unfortunate because objects of these latter kinds are more directly known than things, and the processes by which we know them present fewer and less perplexing difficulties. The processes of knowledge and the objects of knowledge are here of the same order or of kindred orders. The initial crux of sense-perception, therefore, and not a few of the problems following from it, tend to disappear.

Finally, a philosopher's theory of perception leads to certain views concerning recent discussions of the nature of truth or tends to ally itself with certain positions in regard to them. The analysis of sense-perception in terms of symbolism, for example, facilitates the understanding of the pragmatist's contention that the major part of human knowledge is always indirect. And, in general, the contributions of pragmatism to the psychology and the philosophy of knowledge and belief are seen to deserve grateful recognition. Notably, their accentuation of the affective and conative factors in the processes of cognition and their defence of the legitimacy of these factors are of outstanding value. These conclusions, on the other hand, do not imply agreement with the resolution of knowledge into a function merely and always instrumental, or with the endeavour to equate truth and goodness or utility and truth. Thus the principle of critical or symbolic realism promotes appreciation of some elements of the pragmatic teaching, while it stands in the way of adherence to the analysis of the truth relation which is favoured by the school. In the event, the correspondence theory of truth, critically interpreted, appears to be more fully consonant with the facts and more nearly adequate to their explanation than either the coherence theory, long its principal competitor, or the pragmatic theory which is offered as a substitute for both the older views.

The early training emphasized—perhaps over-emphasized—a second antinomy of epistemology, the conflict between rationalism and empiricism, with rationalism construed by preference in

terms of a direct analysis. Here again longer reflection, based on study of the modern systems, has modified the positions inculcated by the earlier teaching. For one later modern conclusion, indeed, the endeavour to combine rationalism and empiricism in a single doctrine, the pupil was prepared by the view which found the rational foundations of intelligence in axiomatic principles intuitively perceived. Quite apart from the question of the general validity of intuitionalism, it had the merit of forbidding any neglect of the particular, concrete elements in knowledge, although it resolutely insisted on the rejection of all theories exclusively empirical. To this comprehensive position the writer has consistently adhered. In connection with it, moreover, he has long accepted the view that Kant's celebrated endeavour to unite the two competing doctrines suffered under his initial separation of the lower and the higher faculties of knowledge. The theory of Leibnitz, which finds reason implicit in sense and continuity between them, is nearer to the psychological fact, despite the difficulty of giving "implicit" and "explicit" a determinate meaning, and more in harmony with a sound epistemological analysis. Later modern philosophy, metaphysics as well as noëtics, would have profited if this interpretation had never been abandoned. Sense and reason must both be recognized as constituent factors in the process of cognition, even though the rational element may need the greater emphasis. Likewise in the realm of existence, neither the concrete particulars nor the connective elements can reasonably be ignored. From the beginnings of reflective thinking, neglect of either phase of knowledge or of existence has led to defective or untenable conclusions. Systems which overlook one or the other of the two betray their error, now by their inability to construe the concrete world, now by their tacit assumption of that which they omit or, perchance, formally deny. The rationalist fails in his efforts to interpret by deduction the manifold of concrete experience: the greatest attempt of all, the Hegelian system, broke down when it was confronted with the attested results of inductive science and of history. An example of the second type is furnished by the sciences of physical nature. Their master idea is the concept of

natural law. The imposing result to which they lead is the conception of the world as a system of laws of nature. But this method and this outcome, representing as they do the most successful cognitive enterprise so far carried out by man, may be contradicted by the assumptions in which they are grounded. If sensationalism and atomism are made the groundwork, it must be remembered that these, taken in the absolute sense, furnish no valid basis for systematic construction; while, in any sense, they stand in singular contrast with the principles of continuity, uniformity, regularity, interconnection, and the like, on which also science is based. The inconsistency is not essentially chargeable to science itself, for it is no necessary part of the latter's task to discuss its own epistemological foundations. None the less, the foundations which have been often assigned it are incompatible with the conclusions to which it comes.

In this union of principles, therefore, each of the conflicting epistemologies has its legitimate and substantive share. For philosophical reflection, however, in particular for the reflective thinking of later modern times, it is of importance to lay special stress on the rational phases of thought. The *a priori* interpretation of the rational foundations of knowledge raises a more doubtful issue. In respect of this, the writer has experienced a gradual weakening of affirmative conviction. It is difficult to abandon belief in the *a priori* analysis altogether: with the years this confidence grows steadily less firm. The history of the doctrine is suggestive of other issues, once prominent in speculative inquiry, but which have lost their foremost place, not because solutions, definite and complete, have been found for them, but because belief in their significance has waned. The problem under consideration may or may not prove to be an instance of this type. But the analogy is sufficiently pronounced to render pertinent the question whether it may not be so.

As epistemology passes over into metaphysics, the philosophy of mind assumes primary importance. It has been intimated above that the considered judgment of the writer recognizes the uniqueness of the mental life and the reality of mind as the

subject of conscious experience. It cannot be denied, indeed, that powerful currents of opinion have in recent times run counter to such conclusions. The prevailing trend of thought has favoured the negative, rather than the constructive point of view. On the other hand, it is to be remarked that these destructive inferences have been neither fixed nor universally accepted. Among psychologists by profession the number of the defenders of the self is noticeably greater than it was a decade or so in the past. Concerning the problem of mind and brain, it was hardly considered in order in the United States a quarter of a century ago to advocate the theory of interaction. Yet it became evident shortly thereafter that the tide was on the turn, until a few years later the balance of opinion had greatly altered. And, in general, although the majority of recent thinkers have been negative or doubtful respecting the crucial issues of rational psychology, a succession of able leaders have steadfastly maintained positive views. So Lotze formulated his spiritualistic psychology and metaphysics at a time when mechanical naturalism was in the flush of its success. Followers of Lotze, or thinkers guided by a similar spirit, carried on the work in later decades. In France, and approaching the problem from a different direction, Bergson has defended mind in the individual by his incisive analysis of conscious personality. The over-individual manifestations of the life of spirit have been brought out by the students of the *Geisteswissenschaften* and by the idealistic philosophers, among the latter, for example, by Eucken, although in not a few other respects his system is vulnerable to criticism.

Thus the positive doctrine of mind has not lacked support from distinguished authorities, despite its rejection by important schools of recent opinion. And if it is valid, a further inference may be hazarded, one which ventures to look forward to the method to be followed by the reflection of the future. If the mental life is unique, if mind is real, the time must come when a realization of these truths shall enter as a substantive factor into our conceptions of the world at large. Hitherto it has often not been so, even on the part of those who in principle favour constructive conclusions, for their working ideas have been coloured by

popular notions half-consciously accepted. Too often the real has been equated with the palpable, the tangible alone; the equation forming the background of opinion, although the philosopher's reasoned principles might contradict the narrowness of his attitude. In order to reach a metaphysic commensurate with the facts and leading to valid conclusions, the mistaken habit must be eradicated. Until the readjustment is effected, philosophy will continue crippled in its endeavour to frame a tenable theory of existence.

These inferences, once more, lead on to larger questions. When the theory of perception was under discussion, it was noted that critical or symbolic realism does not prejudge the dualistic problem. But an affirmative view of mind, added to the doctrine of perception, inevitably suggests metaphysical issues. There are, in fact, several types of metaphysical analysis with which such a system of rational psychology may be associated. It may be articulated into an interpretation definitely dualistic. Or mind may be given the primacy by a Berkeleyan disintegration of matter. Or, thirdly, dissatisfaction with "empirical" idealism may motive its replacement by idealism of the "metaphysical" type. In regard to dualism, much will depend on the formulation of the doctrine. The absolute separation of the world into two entirely disconnected halves which bears the name of Descartes—such an abstract diremption of existence is indefensible. As William James remarked, the recognition of two varieties of being in the world must not be allowed to obscure the numerous characteristics which belong in common to both divisions of reality. Nor is it reasonable to forget the connections which subsist between them. Moreover, belief in some sort of a unity of things is fostered by various kinds of reflective inquiry. The longer philosophical study is pursued, the stronger the tendency becomes to postulate a unitary system. The results of scientific thinking point emphatically toward a similar conclusion, although, like philosophy proper, they do not supply a demonstration of it. Some degree of monistic interpretation, therefore, is hardly to be avoided. The question remains whether such a monism of systematic connection necessarily excludes a dualistic analysis of the

objects related. On the whole, a negative answer to this question seems admissible. A moderate, or modified, dualistic theory not dogmatically promulgated, but in a tentative form, may be capable of defence unless one or the other of the idealistic theories can make good its claims.

Empirical idealism possesses unquestionable significance. As a counteractive of materialism, it is of especial value. It may be doubted, indeed, whether it furnishes so complete a refutation of mechanical naturalism as was held to be the case by Berkeley and as the argument has been renewed in recent times. For the destructive analysis of substantial matter may leave the problem of the mechanical order of the world still to be confronted. But over against all theories definitely materialistic, his immateralism had so much of force that it is allowable to echo Berkeley's own appraisal,that if his arguments are not found equal to demonstration, it is reasonable to wish they were. The principal weakness of the doctrine is conditioned by its empirical basis. The foundation impairs the superstructure until the whole is brought into a state of instability. If the denial of matter is maintained, it becomes difficult to defend the reality of mind without abandoning the underlying epistemology; if mind and the relations of things are rescued by a supplement to the definition of "ideas," why, in principle, may not "notions" be invoked by the advocates of the "materialistic hypothesis"? The pinch of this antinomy was felt by Berkeley himself, and increasingly as his work went on. *Siris* was anticipated in the changes made in the later editions of the earlier works. But *Siris*, for obvious reasons, has been a neglected book. The commendation of tar-water as a panacea, the amazing chemistry and the metaphysics associated with it, obscure the development of the philosophical doctrine. Moreover, it is the immaterialism of the philosopher's youth which forms his contribution to reflective thought. The rational idealism to which he was driven in the event, or toward which he moved in order to preserve his message to the world, was neither novel nor of unique importance. The significant fact is that he found the change of position necessary in order to save "the Principle," "the amazing truth," from dissolution, that his thinking which

began empirically took refuge in elements of rational doctrine toward the close.

Is "rational" or "metaphysical" idealism then to be adopted, since idealism of the simpler type falls short of full success? It certainly has done the world great service in recent as in ancient times. With its confutation of sceptical or agnostic theories and, positively, with its stress on the connectedness of thought and of the world at large, it has repeatedly come forward to substitute a rational and affirmative philosophy for one decrepit or fundamentally unsound. It has promoted, moreover, the life of spirit, and the ideal disciplines which represent this in the field of formal inquiry. The debt to Idealism, therefore, is a great one, alike on the part of those who cannot see their way clear to accept it in its entirety, and for its convinced adherents who find in it the sure solution of all the problems of the mind. There are, however, considerations on the other side of the balance-sheet, of which certain may be mentioned here. It is grounded in the nature of the case that Idealism encounters difficulties in its construction of empirical existence. These have markedly embarrassed the systems which have included *a priori* constructions of the factual world. They persist even for the later and more moderate exponents of the doctrine whose appreciation of inductive science and its results has been genuine and hearty. Such issues give trouble in connection with the philosophical consideration of particular things: they become especially refractory with the endeavour to interpret personality and the life of persons. Idealism, once more, takes its departure predominantly from the problem of knowledge. For this reason it is constantly in danger of over-emphasizing the analysis of cognition as furnishing the clue to the explanation of the world, even though some of its later representatives seek to give the factors of activity and volition their due weight. In fine, the uncertainty concerning "thought," not to say the ambiguity of the concept, when thought is invoked as the principle of the world-order; the relation to consciousness and personality, on the one hand, the need to defend a necessary rational order on the other, produce an oscillation of interpretation which, historically, has baffled

members of the school itself. To those without, the crux appears to show even in the terms which are employed to explain the principle. So one of the finest of recent Idealists described it as "that of which the designation as 'mind,' as 'human,' as 'personal,' is of secondary importance, but which is eternal, self-determined, and thinks."[1]

On account of difficulties of this kind, the complete ontological validity of metaphysical idealism continues to be open to debate. Independently of the decision favoured, recognition should be given to the service which it renders by its furtherance of the *Geisteswissenschaften*, or of a considerable part of these. In the philosophy of nature its failure has been conspicuous. To the historical, the political, and the social sciences it has contributed a vigorous forward impetus, compensating in many cases, also, the one-sidedness of opposing doctrines by insistence on complementary phases of the truth. The influence of Hegel on historical study, for example, is well understood. Less familiar, though it deserves equal if not greater appreciation, is the record that, completing the movement which his predecessors had begun, he impressed the principle of genetic explanation on nineteenth-century opinion a full generation before Darwin and biological evolution accomplished their epoch-making work. In politics and sociology, Idealism has counterbalanced the individualism and atomism which have marked so much of modern thinking, in particular the favour which these tendencies have enjoyed among philosophers who in virtue of their birthright use the English tongue. Individualism, in fact, has been characteristic of the majority of Anglo-Saxon thinkers on both sides of the Atlantic. That Locke should favour it was inevitable. It is intelligible, also, that, as Leslie Stephen noted, the Utilitarians, though they often spoke of "man," always meant by man the individual human unit. Hobbes in the early years of English philosophy, on the contrary, and Spencer in later times carried through extraordinary feats of doctrinal construction. The former effected a combination of individualism and absolutism with the aid of

[1] T. H. Green, *General Introduction to Hume's Treatise of Human Nature*, § 346.

his artificial analysis of the body politic and social. Spencer's achievement was almost more remarkable. A great evolutionist, a great sociologist, he yet succeeded in remaining loyal to his inherited traditions. He praises the earlier Liberalism not because its measures lessened human suffering, but because "they diminished the range of governmental authority and increased the area within which each citizen may act unchecked." Factory legislation, food and house inspection, poor relief, free compulsory education, make for "social slavery." In fine, "the undeniable truth" results "that there are no phenomena which a society presents but which have their origins in the phenomena of individual life, which again have their roots in vital phenomena at large."[1]

Extremes of doctrine invite extremes of critical discussion. And though the impulse must be resisted, it is legitimate to point out that, however persistent their influence may be, views like those which have just been described present but half the truth. The conclusion holds, moreover, despite the demonstrable fact that incomplete and partial theories may condition practical good. Error for error, a one-sided individualism may lead to nobler results than an absolutism equally one-sided. Historically, the individualism of the English-speaking peoples has been a source of benefit to themselves and to mankind. Under its guidance they have led the way in the promotion of civil liberty, in the establishment of democracy, in the founding of a chain of free commonwealths around the world. For although their principle is certainly defective, it implies appreciation of the most significant factor in the relation of the individual to the social group, to wit, the supreme importance of personal existence. Whatever be the case with groups of other orders, society exists not for itself, but for the sake of the members which compose it. Alike in the order of fact and according to the scale of values, the collective life finds its end in the lives of the individual units.

At the same time, the defects of the traditional individualism are unmistakable. It misconceives at once the nature of the individual and the nature of the group. Concerning the former,

[1] *The Man* versus *the State*, I, p. 285, III, p. 373.

it assumes that man can exist, or even attain to his mature development, in a state of isolation. It forgets that the individual is dependent on his relations to his fellows, and further, that at least a major portion of the specifically human functions are in part or whole social functions also. Language, science, art, morals, law, faith, the impulses from which they spring and the institutions to which they lead—are not these things, and others like them, the distinctive characteristics of human nature? And are they not grounded, also, of necessity grounded, in man's social life? In the other direction, since social organization is intangible and non-substantial, the tendency results to deny its reality, openly or by implication; to infer that the group amounts to nothing more than an aggregate of the individuals who compose it, to conclude in sum that its characteristics can all be deduced from the characteristics of the individual members, because the two are held to be in literal fact identical. Idealism, old and new, has repeatedly furnished the corrective for these deficiencies. That it incurs risks implicit in its own analysis, and which empiricism and individualism escape, is also proven. It may lead to absolutism, for example, or be associated with absolutistic tendencies, even though the extreme criticism to which in this respect the Idealists have been subjected in recent years was in part engendered by the bitterness of the crisis through which Western civilization has been passing. It may conceivably be the case, moreover, that no single school will find it possible to combine in exact balance the two complementary phases of the truth. In its simpler field, empirical psychology has so far not succeeded in reaching this ideal; and philosophy is certain to encounter greater difficulty still as it searches out the ultimate principles which lie at the basis of the political and social order. Nevertheless, the endeavour to approximate to a comprehensive theory is enjoined by practical, as well as by abstract considerations. The aberration of opinion due to the spirit of war has been pointed out. The end of the conflict and the beginning of the new order impose the obligation not merely to correct such errors, but to attempt a restatement, more accurate and inclusive, of the integral truth. The issue

concerns, in fact, larger interests than those which the groupings of the past have represented. The world-community is visibly in process of formation. The work of establishing its foundations deep and broad has become of paramount importance. To this philosophy and philosophical inquirers must contribute their full share.

Up to this point little has been said explicitly of the realm of values, although from time to time it has been implicitly referred to. In particular, evaluation in the philosophy of religion has gone without discussion. For a period considerably prolonged the tendency of the writer was to favour the method of intellectualism in the determination of religious questions. The direct appeal to faith in support of the principles of religion he considered illegitimate, especially when it was interpreted in the arbitrary and exclusive way favoured by many of its advocates. In time this attitude of rejection underwent substantial alteration. Throughout, as at the first, there has been no recognition of the purely sentimental analysis of faith, least of all of emotionalism in combination with individualistic tendencies. Gradually, however, there grew up a disposition to accept a formulation of the doctrine which is believed to be moderate and tenable. The change resulted from a variety of causes. On the negative side, influence was exerted by experience of the need for a reinforcement of theoretical intelligence if the ethical values, above all if the religious values were to be conserved. Positively, the content and the significance of practical faith gained increasing appreciation as the conviction strengthened that, while it constitutes a supplement to theoretical intelligence, it can be logically articulated into the system of rational principles. At the same time, facts which tended to throw doubt on these conclusions were not overlooked. Among them one demanded special consideration. The appeal to faith in Western thinking has accompanied in a converse sense the rhythm of thought in general. In periods of constructive activity the recourse to practical reason has been limited. The doctrine develops to its maxima in eras when the old is shaken, when the new is not yet established, and men grope in hesitation about the foundations on which their spiritual life

in the past has rested. Even the prominence of the philosophy of values in the reflection of the nineteenth century must in no small measure be ascribed to the influence of such forms of motivation.

The inference lies near that the fluctuations in its history prove the doctrine a phase of reflective thinking rather than a classical type possessing permanent significance. Against this conclusion, on the other hand, certain factors combine in effective rebuttal. The rhythmical recurrence of the movement suggests an analysis in terms of mere expediency. But its persistent reappearance in periods separated by long intervals of time, even though they be analogous, implies a content of principiant value, and this implication is confirmed when the issue is tried by closer examination. The significant content of practical faith is found to derive from its character as a coëfficient of ideal aspiration. Not the "cash value" of belief, nor its emotional effects in the stilling of doubt, the removal of fear, the assurance of peace and hope over against the losses and the apprehensions of life—when the principle is stated in such wise, its exponents either are beguiled into unhappy accounts of their own position or conceive it in defective forms. On the contrary, it is the significance, the ideal meaning, the value of practical principles which endow them with evidential force.

Much depends, in fine, on the way in which the principle of faith is formulated. Here the work of Kant has been preëminent, and greater attention should be given than is sometimes done to the safeguards which he threw around his doctrine. It is not suggested that his example should be followed in assigning a merely relative validity to theoretical intelligence, for Kant's negative conclusions concerning the scope of intellectual cognition widened the gap between the pure and the practical reason rather than facilitated the indispensable welding of the two into a single system. Nor does the *a priori* analysis of practical principles command assent after the acceptance of theoretical *a-priorism* has weakened. But the interpretation of evaluation in terms of reason; Kant's steadfast conviction that faith as well as knowledge is a function of reason, of reason functioning in its practical

form; the subordination of desire and feeling in favour of a rational faith—these positions, coupled with his central recognition of the principle of values, prepared the way not only for the belief of later times, but also for a progressive development of the doctrine's inner meaning. On such foundations it is possible to build more comprehensive and more accurate formulations of the philosophy of values, as these are brought out by the progress of reflective inquiry. As the advance goes on, it becomes easier to construe the principle apart from earlier misapprehensions as well as from the accretions which always tend to gather round it. The tendency to urge it as a substitute for the intellect, or even to inculcate it in contravention of the latter, is seen to be an aberrant impulse arising from temporary practical need or from inadequate understanding. On the positive side, the complementary character of the two processes of the spirit comes more clearly into view, and with this the resultant ideal of their concurrent action. Toward the realization of this goal speculation and evaluation should alike press onward. In point of content, faith, so construed and grounded, supports the theistic view of the world and leads toward the acceptance of the Christian system.

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NATURE AND REASON

By JOHN ELOF BOODIN

Born in Sweden, 1869; Professor of Philosophy, University of California at Los Angeles.

BIOGRAPHICAL

WHAT is a life? No one knows. It emerges from the darkness like a meteor, makes a transient trail and disappears into the darkness again. What has philosophy to do with life? Sometimes philosophy is an expression of life, but more often it is make-belief, a compensation for the failure of life. An autobiography of spirit must at best be an after-thought and is of doubtful value. If I could point to a master, or masters, as the source of my philosophy, the task would be simple. But I can call no man master, though I have learned from many masters. What I have done is the result of a lifetime of meditation with its significant moments now and then, for the most part too fleeting and too much a part of the texture of life to receive a date.

I was born on a farm in the parish of Pjetteryd in the picturesque highlands of Southern Sweden. My ancestors had lived in that neighbourhood for generations and had been leading citizens, but their education had not extended beyond the parish schools. The clergyman's children were the only ones who went away to college. My father owned a considerable estate with a large pine forest, and would have been prosperous had his family not been so large. He married a second time in middle life, and I was the child of a young mother and a father advanced in years. I was nurtured on the Bible and the legends of the place. There were the groves and altars of the old Stone Age and there was the much older background of the trolls that lived once in the hills and in the bordering lake. My father told me the folklore of the place as his mother had told it to him, leaving my child's fancy free. Thus I learned respect for time.

I helped in the work on the farm until I was fourteen, and learned to love nature and respect the processes of nature, with its seasons of seed-time and harvest. There was not much machinery and the contact with nature was intimate. Through this training I became an empirical realist. I also learned the law of mutual aid. My parents were a sort of Providence to the neighbourhood, looking after the poor, the sick, and the dying, and I was the messenger boy. They were people of simple piety who believed that nature and man are included in a beneficent personal order in which there were evil forces as well as good, but the good prevailed. In this way I probably laid the unconscious foundation of a cosmic idealism. I came to love poetry and write verse, and acquired a feeling for the beauty of language. I roamed much in the woods, where I rounded up the cattle at night and knew all the wild-strawberry patches. I was given to day-dreaming about theological things, which occupied a large part in my education. This day-dreaming eventually became philosophy, which has sustained me in the vicissitudes of my career.

I graduated from the parish schools at the age of twelve. This might have been the end of my schooling, but a young curate, Pastor Bomgren, who conducted the examination, became very much interested in me and told my father that I had a better mind than he (the curate) and that it would be a pity to make a farmer out of me. He offered to take me into his family to tutor me for the gymnasium. He died before his plan could be put into effect. But he had changed my life. He seemed so grand to me that I could not believe what he said, but I knew that somehow I must have an education. His successor, Pastor Sjöfors, with his kind wife, carried out his intention, and after some tutoring I entered the second year of Fjellstedt gynmasium in Upsala, of which Kjerfstedt was the kind and masterful rector. I was the leader of my class, but the second year I fell ill and was sent home. Shortly afterwards my father died; and I decided to emigrate to America.

In the summer of 1887 I came over in the steerage and landed in a mining town in Illinois, where I worked in a blacksmith's shop for two years, getting what schooling I could on the side. The realism of wielding the sledge was added to the realism of the farm. I also learned a great deal about human nature in its rough, though honest and kindly, form. I graduated from a Normal school and taught for a year before I found my way back to college. I entered the University of Colorado as a sophomore in 1892. My most significant contact there was a course in Comparative Literature with Raymond Brackett, in which I was encouraged in interpretative writing and recommended to the editorship of the literary magazine as "the best writer of English in college." But I had spent my earnings. I was called to Minneapolis to help in the work of the Episcopal Church among the Swedish immigrants, and so found myself in the University of Minnesota in 1893–94. This was an important year because I was introduced to the social sciences by the beloved W. W. Folwell, to the psychology of William James by James Rowland Angell, and to Greek philosophy, both in survey and in the original. I wanted to go east, if possible to William James. An opportunity offered itself to go to Brown University in 1894. I became a student of James Seth for two years and discovered philosophy. I found that it was what I had always wanted. Really, it was my own philosophy of which I began to become conscious and which I tried to express in opposition to my beloved teacher and the great masters. It is characteristic of my mind that it has developed chiefly by opposition. The first masters with whom I wrestled were Kant and Hegel, whose works we took up for detailed study in seminars. I was fortunate in receiving my early training under so fair-minded and objective a teacher as James Seth. Seth taught me the importance of sympathetic understanding of those with

whom I disagreed, and later G. H. Palmer pointed out that every philosophy means a great deal to the man who creates it. My earliest meeting with William James, whom I had wanted to know for years, was on the occasion of my presenting a criticism of his essay "Is Life Worth Living?" at our Philosophical Society at Brown in 1896. I succeeded in rousing him to an animated reply. When he returned at the end of the school year to give the annual address before the Philosophical Society, he introduced his paper, "The Will to Believe," by saying that it was written to meet objections which had been raised on his previous visit. He was my friend for life.

In 1897 my dream to enter Harvard was fulfilled, in part through the interest of C. C. Everett, who secured me a Hopkins Scholarship and followed my course throughout with paternal solicitude. William James greeted me affectionately and was most sympathetic to my venture into philosophy. It was the heyday of philosophy at Harvard, the day of James, Royce, Everett, Palmer, Münsterberg, Santayana. Among graduate students I was contemporary with Bush, Lovejoy, Montague, Holt, Perry, Sheldon, Savery, Rieber, Horne. Strangely enough I lived mostly with my own thoughts and took little advantage of this brilliant array of philosophers. The only course I had with William James was a seminar in psychology. I attended seminars of the other men, except Santayana, whom I met only occasionally and with whom I had only one heart-to-heart talk on philosophy. William James kept in kindly touch with me, inviting me to his home to talk over my incipient ideas. But Josiah Royce was the master with whom I wrestled for the salvation of my soul from 1897 to 1900. It was in his seminar especially that I developed and expressed the beginnings of my metaphysics. It was in opposition to absolute idealism that I developed my theory of a real non-serial time which I first advanced in Royce's Hegel Seminar in the spring of 1898. Royce had invited James to be present on the occasion. James, of course, was warmly sympathetic. I had expected to be caught in the coils of Royce's dialectic. No man at Harvard could stand up against Royce in argument. Instead of attacking me, however, Royce devoted himself to a sympathetic exposition of my idea and paid me the high compliment that I had discovered a new concept. I worked on it the following year and presented part of my material as my doctor's thesis in 1899. Royce was good enough to say before the seminar that in his Gifford lectures he had modified his exposition of time to meet my criticisms. I was appointed Walker Fellow and Lecturer for the following year, being given the opportunity to present my material to Royce's seminar while he delivered the second series of his Gifford lectures in Scotland. In 1900 I was awarded the Austin Teaching Fellowship, but on the insistence of G. H. Palmer, who

was chairman of the department, I gave that up and accepted a professorship at Grinnel College in Iowa.

It is impossible to measure the influences that act on our minds and determine our course. The greatest contribution that Harvard—James and Royce in particular—made to my development was the faith which they so generously manifested. On a visit to me in the West, some time after I had left Harvard, Royce, in the kindness of his heart and fearing, no doubt, that I might be discouraged in my isolation, said in an awkward, bashful way that he felt he owed it to me to let me know that at the time I took my degree it was the opinion of the department that I was the best metaphysical mind that had come to Harvard so far, and that he thought it still true, but that he could not vouch for the future. This to me was the verification of the prophecy of the young curate, and has been to me what the oracle of Delphi was to Socrates. Whether I have proved or disproved the oracle, it has given me courage to keep on with my search for truth through years of neglect. It may seem frank to say this, but I am trying to write as honest an autobiography as I am able.

My active teaching career has been spent in the West, with rare leaves of absence—four years at Grinnell College, nine years at the University of Kansas, fifteen years at Carleton College (including the year 1927–28 when I was visiting professor at the University of Southern California), and from 1928 at the University of California at Los Angeles. My philosophy has thus taken form on the prairies of the great Middle West—the heart of old America—with its strong common sense and conservative social philosophy. The expansiveness of nature, with its unimpeded vistas and yet its sense of homely friendliness, must, it would seem, in the course of years get into a man's spiritual outlook. So far as my social relations are concerned, they have been mostly with the Western students whose hearts and minds have been as expansive as the prairies. I have never felt consciously restricted in my thought. What the unconscious effect of the massive conservatism of the West has been, I cannot say. The fundamental postulates of my mind were probably formed unconsciously in the earlier period of my life, and the West has been a continuation of my early life. Individual genius follows its own course, and if the environment is not congenial to its fundamental traits it will express itself in violent antagonism rather than agreement. I have always tried to be honest with myself and others, and my students have responded with honesty and affection.

I ought, perhaps, to say something about my relation to pragmatism; but I own that I feel a strong repugnance to doing so. For I meant to do a generous thing and received only misunderstanding as my reward. The thing to have done would have been to attack

pragmatism, and then I should have received some recognition. But pragmatism was attacked on all sides and the debate only led to more confusion, so I thought I would try the method of sympathetic interpretation. Pragmatism certainly claimed to be a rediscovery of everything that is sane, and I tried to view it in that light. The method of C. S. Peirce aimed at clarification of meanings and might be used on pragmatism. I felt a deep friendship for William James. He was not well and was very much depressed at what seemed to him wilful misunderstanding of "us," meaning Schiller, Dewey, and himself, He wrote me rather pathetically that he wished I could see my "way clear to join the movement." I had a sporting interest in fair play, and felt that I ought to do what I could to help in clarifying the issue. So I wrote some papers in which I tried to interpret pragmatism in a realistic and objective manner. One of these papers: "What Pragmatism Is and Is Not," I submitted to William James. He replied enthusiastically, and said that I had "played all the variations and hit it right on every point," and that I was "one of the very few who have understood what we meant." I published the paper in the *Journal of Philosophy*, 1909. Schiller, though not enthusiastic, thought that I had defined pragmatism fairly, but that humanism means something more. Other pragmatists seemed to resent my interpretation. It appears that in attempting to clear pragmatism of misunderstandings I had "evaporated the richness of its meaning" for them. There was, I think, the further feeling that pragmatism—like the protective tariff—should be revised by its friends and not by an outsider. Many years later, in his *Reconstruction of Philosophy*, Dewey made many of the restrictions which I had made with an "of course," which was characteristic of pragmatism. I have at any rate the satisfaction that if I did not please the pragmatists I did not sacrifice truth as I saw it. Whether I had any influence in turning pragmatism into a more realistic direction, I do not know. The papers on pragmatism were included in *Truth and Reality*, 1911. But my interest has always been metaphysical rather than epistemological, and I returned to my main purpose.

Pragmatism is now dead, and it is not seemly to speak ill of the dead. No one seems to want to own it now, except writers of French doctor's theses. Schiller is a "humanist" and Dewey a "naturalistic empiricist." William James exists in glory in spite of pragmatism. But pragmatism, though dead as a movement, has left us an adjective which is used a great deal by men of science—the adjective "pragmatic." Intellectualism has emphasized too exclusively the æsthetic aspect of truth as coherence and simplicity. "Pragmatic" emphasizes the other aspect, the convenience of an hypothesis in dealing with the emergencies of experience. Truth as we have it is never an exact

picture of the nature of things, but it enables us to proceed in the direction of further acquaintance with reality. Pragmatism is America's most characteristic contribution to philosophy; and its effects have been felt, not only in philosophy, but still more in such practical fields as education, religion, and law. Long live pragmatism!

There has been, I believe, a continuous and consistent development in my philosophy during the last thirty years, though I have made no conscious effort toward consistency. My ideas have come to my mind as a result of an inner and mostly unconscious dialectic. But sometimes some precipitating circumstance is evident. It was the reading in 1897 of Royce's *Conception of God*, especially the Supplementary Essay, which called forth my first paper on the reality of time as against absolutism—Hegel, T. H. Green, and Royce. My reading of Alexander's *Space, Time, and Deity*, in 1920, called forth my paper "Cosmic Evolution," upholding cosmic interaction as against mere emergence. My critical reaction to pragmatism made me conscious of the importance of recognizing the structure of truth as well as its function. Contemporary movements have been chiefly useful as irritants, when I have been conscious of them. If my development in retrospect seems consistent, the consciousness of this development has been decidedly discontinuous. The first idea comes as an overpowering intuition with great emotional vividness. I seize upon a piece of paper and write it down. Then through weeks, perhaps years, I build a scaffolding for it. And then perhaps the reader wonders why the idea should impress me so much when it has such a natural place in history. But the setting is all an after-thought.

The first expression of my philosophy took the form of temporal realism in my papers before Royce's Seminar and in my doctor's thesis on "The Concept of Time," 1899. These remain unpublished, but the fundamental idea was developed in the monograph, *Time and Reality*, published in 1904. (The idea was afterwards restated in Part IV of *A Realistic Universe*.) My first published paper, "The Reality of Religious Ideals" in the Grinnel *Unit*, 1900, indicates the main trend of my realism. The paper was afterwards enlarged and became the last chapter in *Truth and Reality*. My empirical realism and metaphysical energism, with the functional conception of qualities and values, found provisional expression in a series of papers in various journals. These papers were subsequently revised or rewritten and issued in *Truth and Reality*, 1911, and, more especially, *A Realistic Universe*, 1916. (The preface in each case indicates the previous publication.) My cosmic idealism found expression in *Cosmic Evolution*, 1925. The date of the books is no indication of the birth of the ideas or even their publication. Thus Chapters I, IV, and

IX, which indicate the main trend of *Cosmic Evolution*, were published in 1921, while the manuscript of the book went to the publishers the latter part of 1924.

In the main, twentieth-century science has furnished the content of my philosophy, but this has been assimilated to the other types of human experience and to the historic structure of philosophy. Though thought is a living process and must be tested by its actual success in systematizing present evidence, it is a matter of surprise how much of what seems original is foreshadowed by the geniuses of the past. Philosophy is akin to poetry in its divination of the future.

NATURE AND REASON

Nature and Human Nature

It is because we live within the matrix of nature that we can hope to understand nature. We must take account of nature as it is from our frame of reference, including our human organization, biological and social. There has been a tendency of late to emphasize nature as it appears at the level of electrons. But nature is not any more real at the level of electrons than it is at the level of human personalities. In any case we know nature only functionally, i.e. through its reactions. If there is anything that science teaches clearly at present, it is that nature is energy. It is not some sort of stuff, and certainly not neutral stuff. Nature is what it does. To understand the activities in nature we must take account of the whole relevant situation in nature. Human organisms are structures in nature and of nature. They are reagents in the matrix of nature. The appearances of nature in relation to human nature are real appearances. But the appearances vary at different levels of nature owing to the character of the reagent. Nature appears with a variety, definiteness, and objectivity to an organism, with specialized sense organs and a highly developed nervous system, that it cannot have to a jelly-fish. Pathological evidence shows that cerebral structure with its patterns makes possible an epicritic reaction to stimuli, i.e. a reaction to the location, intensity, and rhythm of stimuli, in contrast to the protopathic all-or-none reaction when the cerebrum fails to function. When we talk about nature, we generally mean nature as it appears to a normal, developed human individual. The baby does not react to nature as a mature individual does, partly because its brain is still undeveloped, partly because it lacks the social schema which the mature person brings to nature. The appearances of nature vary with the duration and structure of the reacting individual in the matrix of nature. At each level of nature the individual might say to nature: "that art thou."

As our attempt to know nature is primarily a relation of

nature to a human organism with its physiological and mental patterns, the trail of human nature is, indeed, over all our knowledge. This is no reason for agnosticism in regard to our knowledge of nature, since human nature is part of nature, and the reactions to human nature are real relations within nature. Difficulties arise only when we try to imagine what nature is to a reagent which is not human. Our categories and judgments, so far as they prove relevant to nature in its relations to us, are true of nature—in those relations. We try also to know nature in its relation to other reagents. But we must bear in mind that we are observing the appearance to a human agent of these reactions in other contexts. Our faith in knowledge implies that nature in its totality has a constitution akin to the human mind, and that our thinking of nature is relevant to nature in that sense. But there still remain the part-relations within nature on simpler levels of nature which we try to describe as best we can. At best our knowledge of nature on the lower levels is pragmatic, i.e. useful for prediction and perhaps control. We cannot have direct acquaintance with nature at these levels. In humanizing these levels, as we do in taking them into our schemes of knowledge, we are dealing with their character for us. What we must be careful to avoid is to discredit the relations of nature within the level in which we live and think in favour of the simpler relations. The epicritic reactions to nature are not less real than the protopathic. The former are the true appearances of nature at the level on which they appear, and they are the more adequate appearances.

The mechanical theory made it appear that the individual reactions in nature become more definite and predictable the lower down in the scale we go, but that was because mechanism is an intellectual transcript which we put into nature. The mechanistic interpretation of nature is as anthropomorphic as the romantic interpretation. Recent physics has shown that on the simplest level of nature the individual reactions are diffuse and uncertain, and that it is only because we deal with mass reactions in our treatment of matter that the reactions have for us the definiteness and predictability which they

appear to have. The determinateness is statistical. It is, of course, absurd to speak of this indefiniteness of nature at the simplest level as freedom. Freedom can come only with organization, and choice based upon organization. But it is a gain to have destroyed the fetich of mechanism in nature.

We must bear in mind that we live on a macroscopic plane in nature, and our adjustments are to this plane. Electrons can be experimented with only in relatively abstract conditions in nature—a relative vacuum, shot through with enormous potentials of energy. At the temperature of the hot stars, structure and determinateness may be impossible. The physicist's findings seem at present contradictory and confused. Perhaps that is because the physicist has tried to interpret the lowest level in terms of categories borrowed from higher levels. Electrons figure in our living only in mass organizations with their unique properties. On this plane our convictions as regards temporal and spatial relations, of causal determinations, of the community of minds have relevance, whatever the results of physics may be within the elementary plane of nature. It is on the plane of human organization that we have science and philosophy. Electrons or jelly-fish, or even chimpanzees, cannot make the reactions of science and philosophy. Science does not question the primary convictions which have been born out of our life in nature. It deals with specific problems. Philosophies must be criticized on the basis of their success in weaving into as simple, coherent, and adequate a scheme as possible our beliefs and judgments about the world in which we live. It is not the business of philosophy to make absurd the convictions by which we live on the level of human nature, but to make them explicit. Obviously it must do so from the point of view of our human intelligence since we have recourse to no other.

Philosophers' Rationalizations

In order that philosophy may clarify nature it must place itself in the midst of the living continuities of nature, and not separate itself from nature. It is the glory of ancient Greek

thought that it never separated man from his environment, nor thought from nature. Its conviction, that reality must be taken in its integrity in order to be understood, is sound, however crude the results. Even Parmenides, in spite of his scepticism as regards the senses, is clear that thought must not be separated from the world it is to know. And Protagoras, in spite of his emphasis on human nature, is confident that nature is as it appears to human nature. The great rationalists, Socrates, Plato, and Aristotle, while they emphasized that knowledge means an insight into structure, and not a mere heaping up of perceptions, held to the conviction that it is the structure of reality which we strive to know, and not something inside our heads. But here the Golden Age of philosophy closes. Neoplatonism sought refuge from the problems of a complex and perplexing world in a mystical trance without distinctions. And scholastic philosophy was preoccupied with setting in order dogmatic theological beliefs. But neither of them separated intelligence from the world it strives to know.

Modern philosophy got on the wrong track at the outset on account of a false psychology. Descartes was a great physiologist, and discovered a great deal about the nervous system. He also had a good intention, viz. to place the soul in nature. But his conception of the soul as a point-entity situated in the centre of the brain made the relation absurd. That he made the mistake of making the pineal gland the centre of the brain is of little importance. Aristotle thought of the brain as a refrigerator for cooling off the blood, and supposed that the heart is the centre of the soul, but he had the right psychology, viz. that the soul is the dominance of a certain form or structure which makes the organism function at a new level. Plotinus was more nearly right than Descartes when he located the body within the soul, for mental activity includes the whole organism with a plus quality which distinguishes mental activity from merely automatic activity, which mental activity uses. Mind is a structure in nature involving, not merely the physiological mechanisms, but the social environment and the cosmic environment. It is reality functioning in a unique way in a

milieu of unique structure. Descartes' conception of the soul as an inextended thinking substance in an extended inert body made any commerce of the soul with its environment impossible, and therefore made knowledge impossible. And the absurdity was not lessened by the parallelism of Spinoza or the pre-established harmony of Leibniz. It is safe to say that the mechanistic physiology of Descartes has been and remains the greatest obstacle to a sound psychology and a sound philosophy. By isolating mind from its environment, it has been the source of the false subjectivism that has dominated modern philosophy. The remedy proposed by behaviourism, viz. to eliminate mind altogether, is not likely to lead to an intelligent appraisal of reality. The only hope is that physiology may in the course of time follow the lead of the new physics instead of the old, and discard mechanism as a scientific concept altogether.

Descartes' isolation of the soul from its *milieu* in nature led to Locke's spurious distinction of primary and secondary qualities. The former are supposed to be duplicated in external nature, and to be constant and invariable in things, independently of the organism; the latter are supposed to exist only in consciousness, and to be the result of the action of the qualities of nature upon the organism. Both primary and secondary qualities for Locke serve to characterize things, and are the only pragmatic basis of our consciousness of things. But both are events or "ideas" in consciousness. Locke's conception of knowledge as nothing but the agreement or repugnancy of our ideas insulates knowledge from the world which it is to know and makes it unreal. Experience becomes a container instead of a relation as it really is. While Locke still believes in the correspondence of the primary qualities and their arrangement with their archetypes in nature, it is obvious that this external world cannot enter the field of knowledge which is concerned only with "ideas." Berkeley draws the inevitable conclusion, and the external world becomes only a set of sense qualities. Since these are conceived as "ideas" or psychological events, Berkeley thinks they must exist in a mind and have a mind as a cause; and since this cause cannot be our private mind,

it must be the divine mind which causes the "ideas" in us with the regularity and objectivity which we observe. Hume returns to the naturalism of Locke as regards sense qualities. But for Hume they are just "impressions," while mind resolves itself into a string of distinct psychological events, the only difference between psychological events and sensible events being a difference in vividness, i.e. a functional difference. Nature figures merely as assumptions of unknown powers. The order of nature is not in the events of experience, for these are distinct and separate. Our feeling of causality is due to "unknown qualities" or "a natural instinct" of human nature, and is added to the constant conjunction of events in experience. The conjunction of events is contingent and may surprise us at any time. Psychology has usurped the place of metaphysics; and Hume's psychology does not rise beyond animal instinct, and the conditioning effect of habit. We cannot speak of structure, either in the human mind or in nature. The world is a meaningless show. It is true that we retain an animal faith in the show, but that is due to irrational instinct. Hume exposed the futility of the intellectualistic assumptions of his day and made philosophy a huge joke. We shall have to ask Hume to consign his own philosophy to the flames with other useless knowledge. What a pity that Hume could not have made his sound instinct for reality the starting-point of his philosophy instead of a refuge from it!

Kant added *Gestalt* psychology to Hume's psychology of habit. But unfortunately he accepts Hume's conception of experience as a succession of separate and distinct events, and the separation of these from reality. Hence the forms must be superimposed arbitrarily upon the events. Kant was right when he maintained that nature exists for us as determined by the structure of human nature. But Kant commits two errors in his account of the forms which human nature contributes to nature. One is a mistake in analysis. He confuses the contribution which is due to tradition—in his case the Newtonian tradition—with reflex action. The other mistake is in supposing that the structure of the human organism must

be irrelevant to nature-as-it-really-is. This artificial separation of human nature from nature results in Kant's regarding the particular appearances of nature as "faked" by human nature in being "given" to human nature, and it results in his regarding the structure of human nature as arbitrarily imposed upon the data of nature. Hence the world as experienced, and as investigated by science, becomes a show world. The unity of apperception becomes a magic circle, separating the cognitive process from reality. But human nature is part of nature, and the appearances to human nature are true appearances. Nature is not "given" to human nature in the cognitive process; but the cognitive process is nature functioning at a certain level. Mind is the crest of the wave of nature, or rather the dominant chord in a matrix of waves having a unique organization and quality. It is the whole-situation in nature which has form, not something in our heads. Kant's spurious invention of an intelligence which should create its own data as well as its forms was intended to get rid of the artificial separation. But it was a purely gratuitous invention of which Kant himself made no further use. We can conceive of no such intelligence. But his suggestion led the romanticists, who felt no restraint of fact, to put themselves in the place of the Almighty and by the "omnipotence of thought" create their own world *a priori* with supreme contempt for experimental science.

Present philosophy is a whited sepulchre, calcimined with a coating of science and mathematics, but within are the dead bones of the past, and the ghosts walk abroad. The Cartesian dualism and the artificial empiricism which was based upon it form the background of "critical realism." There is no agreement among "critical realists" as to what we know. Some seem to think that we know certain primary qualities, such as shape, size, and position. Some think that we do not know the properties of nature at all, but know their order. The percepts, the ultimate data of knowledge, are mere "patches in the brain," in the picturesque language of Bertrand Russell. How we get out of our heads to perceive the structure in nature is a mystery. Perhaps it is just certain philosophers who are

out of their heads. Some think we know reality only under the guise of certain essences which, though they emerge somehow in the reaction of the organism to nature, do not exist in nature, but in some eternal realm of their own, wherever that may be (evidently in the head of some philosophers). The "direct" or "naïve" or "new" realists, on the other hand, insist that they intuit the properties as they are in nature, independently of human nature. For them the percipient organism is a neutral medium. All relations are external relations, i.e. make no difference to the terms related. The Cartesian substances have become neutral stuff—mere transparent ghosts. But the ghosts remain. In the meantime romanticism, with a philosophy based upon wish-psychology, lingers on. But the almightiness of thought is not so impressive as it was in the nineteenth century. None of the current philosophies have really connected with the energistic theory of the science of to-day. Meanwhile, a crude behaviouristic psychology is inoculating the popular mind with a crass nineteenth-century materialism. It might be well for academic philosophers to take a holiday and go into retirement, until the dialectic of scientific and social advance shall produce an appropriate philosophy as in the days of ancient Greece. But as the chief end of academic philosophy is to furnish a living for professors of philosophy, such a renunciation is scarcely to be hoped for. In any case it would not avail unless we could muzzle certain popularizers of science who are corrupting their science with the old subjectivistic traditions.

Prolegomena to Future Philosophy [1]

If we are to philosophize we must recover the sense of reality of the plain man and the unsophisticated scientist. We must place ourselves in our theory where we live in fact, viz. in the energy *milieux* of nature. Our psychological organism responds with its duration and organization within nature. It is not neutral. There is nothing neutral in nature. Everything is more

[1] For a fuller statement see *A Realistic Universe* (Macmillan), 1916, and *Cosmic Evolution* (Macmillan), 1925.

or less determinate activity. Nature is what it appears to be in its various *milieux*, including those of which a percipient organism is an aspect. It does not hide behind its appearances. But the real appears. In this Hegel had the true insight. The perceptual appearances of nature are not patches in a brain. They are characteristics of a total situation in nature in which we distinguish stimuli, sense organs, nerves, brain, and a mental structure with its tradition. But these are not separate entities. The psychological organism, with its individual duration, structure, and initiative, is for science a "bulge" in a cosmic field of energy. The soul expresses nature in a certain *milieu* of nature. It is not a rank outsider. It is not a string of psychological events in a brain, but a dynamic structure of an organic situation in nature. Even an imaginative event is not a patch in a brain, but an aspect of the activity of the entire organism, including the sense organs, as well as the nervous system and the brain.[1] Mental continuities in social communication exist in nature as truly as electromagnetic continuities. We have been misled by mechanical metaphors to discredit mental communication and to imagine minds as patches in brains, interrupted by the mechanical nexus in nature. But our recognition of the immediacy of mental continuities is as irresistible as that of sense continuities when they exist. Language is not the essence of mental continuities but the code, which must, of course, be built up by a conditioning process. But it is the quality of mental continuities which enables us to distinguish them from one another, and from mere wind for which we also have language. This does not mean ghost communication. It is the specific situation in nature which has a mental quality just as another situation has the quality of colour. In either case we must interpolate a medium which will help us to explain the experience, not one which will make the experience impossible.

We must distinguish our primary convictions, which are born out of the matrices of nature (including society) in which we live and act, from our rationalization of these convictions.

[1] *Cosmic Evolution*, pp. 147–154.

Folklore is encrusted with rationalizations which we assimilate so early in our experience that they seem primitive to us. Such encrusted rationalizations require criticism. The primitive convictions no one doubts in his heart nor ceases to act upon them. Among these convictions are the following: that we live in a world of interacting things, some of which are social, that we know these things through creative insight into their behaviour, that these things are changing things, but with such constancy that we can in a measure learn to anticipate their behaviour in specific situations, and that they are spread out with reference to one another and ourselves at various distances. The rationalizations of these convictions have been various. There have been different theories about the nature of things, about the agency of things, about their flux and constancy, about their temporal and spatial relations. Rationalizing philosophers have professed to doubt the reality of the physical world with its apparent properties and its temporal and spatial characters. But their conduct has corresponded to their primitive convictions. I have found that my noble friends among the epistemological idealists live very much as I do, in spite of their theories that matter, space, and time are mere appearances. They require food and shelter like other men. They buy coal to keep warm, and they do not treat coal as spirit. They use various means of locomotion to get to places, in spite of their theoretical disbelief in the reality of space. They worry about the passing years and about getting old, in spite of the supposed ideality of time. Worst of all they die and deprive me of their companionship, at least in the familiar way. Their faith in an eternal order of meaning and value is sublime and inspiring. But their conception of it does not seem to explain the world in which we live. Their philosophy is more of a compensation than an explanation. What men live by is their real metaphysics. Their rationalizations must be treated critically.

It is the province of science and philosophy to rationalize the matrix of nature in which we exist and act. But we must not forget that our rationalizations grow out of the tradition

in which we live. We are prone to find that reasonable which is congenial to our prejudices. Throughout the process of rationalization, certain primitive convictions persist. They are the real *a priori* element in the cognitive process. But man cannot live by primitive convictions alone. He must attempt to understand his relation to the world. To this end he must try to re-create the structure of nature by imaginative hypotheses. These in turn must be criticized both from the point of view of their coherence and from the point of view of their suitableness to predict the behaviour of nature. In the limited state of our knowledge, the latter criterion is more important. We may have to work with inconsistent hypotheses for the time being. This is illustrated in present physical theory. Both the electron, the unit of material energy, and the photon, which is the unit of radiant energy, may be regarded for some purposes as waves and for other purposes as corpuscles. It has been suggested that they travel as waves and react as corpuscles. We have at present no satisfactory theory of either material or radiant energy. To be satisfactory our hypotheses must be both coherent and serviceable. The more successful our rationalization is in these two respects, the more we feel that we have imitated, in our conceptual structure, the structure of nature.

The knowledge relation is a momentous and unique relation among the relations in nature. To say that the cognitive relation is neutral and makes no difference to nature is absurd. Nature as it manifests itself in the cognitive situation has a clearness, definiteness, organization, and value which it cannot have in other *milieux*. One cannot over-estimate the effect that conception and language have in articulating the distinctions in nature, though they have, in the sophisticated mind, given rise to false separations. What we must bear in mind is that nature is pluralistic, that it exists in an indefinite number of other *milieux* besides the cognitive, and that the other *milieux* have their own conditions and characteristics of which we must take account indirectly, i.e. because of the differences they make to the cognitive *milieux*. The wood burns to ashes whether

we watch the process or not; and we must try *a posteriori* to understand the conditions of the *milieu* in which wood burns. How difficult this is can be appreciated only by one who is familiar with the present problems of the physical sciences. So far as knowledge is true, in the sense of the above criteria, it deals with reality as it is. Since knowledge involves a creative element, an imaginative venture, it is liable to error, and must be corrected in terms of the primary experiences. In this sense it is instrumental. But the love of knowledge is an end in itself, and has its own value. The relation of philosophy to common sense and scientific knowledge should be to criticize the partial knowledge with a view to wholeness of knowledge. But in its effort to attain complete insight into reality, philosophy is concerned, not merely with science, but with art and mystical experience and their contribution to the meaning of life.

The fundamental conception of reality in the science of to-day is that of individual systems of activity in action, reaction, and interaction with one another. An activity system is the ultimate unit of existence, but activity systems are complex to thought, and can be analysed into certain attributes. These are our conceptual abstractions for the purposes of description and cannot give us the uniqueness of the individual reality. This uniqueness can be grasped only in æsthetic and practical realization. It is an insight gained through appreciation, not mere analysis. But if conceptual thought is unable to reproduce the individual synthesis, it can describe and predict the behaviour of things. In analysing an activity system, we find we must take account of three types of variables—energy, time, and space. Henri Poincaré threw out the fruitful suggestion that energy means constancy. Einstein has shown that inertia or mass is energy of the opposite sign, thus getting rid of the dualism of matter and energy. In describing any activity, such as a falling body, a chemical composition, a type of radiant energy, we find that there is a variable or a set of variables (which are constant under determinate conditions), such as gravity, chemical elements, quanta of radiant energy. But these empirical constants by themselves do not constitute activity.

We must also take account of its spatial and temporal aspects. It is fashionable now to hyphenate the latter into space-time in describing translations in space. We have then four co-ordinates in terms of which we describe motion. Our mathematical picture is a purely descriptive device and, as Einstein says, has "no physical significance." Suffice it to say that in order to have description we must have certain identifiable constants which we can track through space and time. Such factors do not exist in isolation. They are aspects of activity systems, i.e. they always involve time and space. In material systems, electrons are the units for description. We must remember that constancy is here used in a relative sense. According to the theory of relativity there are no absolute constants. The units of mass, length, and duration vary with the perspective in a world of relative motion. They also vary with the field. We cannot regard our variables in isolation from the structure of the field in which the activity takes place.

The analysis by science is pragmatic and does not pretend to give the full implications of the postulates involved. It is an edge, as William James would have said, by means of which we lay hold of reality, but it is a thin edge. The spatial and temporal aspects, as dealt with by the physical sciences, are especially thin and all but obscured in the artificial conventions which have been substituted for them in the interest of description. There is particularly a tendency to spatialize time, and thus lose sight of its metaphysical significance, as Bergson has so well pointed out. The merit of science is that it has recognized that, in some sense, space and time are essential aspects of activity systems. The relations in the real world are never a complete close-up as in the being of Parmenides. The action in activity systems is always over space, and always involves the passage of events. That is the intuitive basis of scientific description. The mathematical conventions which it uses are instrumental towards predicting occurrences whether within an individual system or between systems. I can now claim the support of Einstein in holding that in order to describe dynamic relations in nature, we must postulate a medium of

space as well as matter. Without spatial distance, there could be no metric concepts. The nature of space must be ascertained empirically. What science requires is a metaphysical continuum in which (to use Einstein's language) there are "no parts that can be tracked through time." Space has "no mechanical or kinematical properties," no inertia. It has absolute conductivity. It lends itself to three dimensional location. Einstein adds a peculiar property of his own, viz. that space or space-ether is capable of having its geometrical structure altered in the neighbourhood of matter. But whether this is true of space or of a physical medium in space remains to be established. We must, I think, accept the physicist's and astronomer's finding as to the nature of space. The measurement of space in terms of conventional units is secondary, and presupposes the objective reality of space. The extensive units of measurement are derived from bodies in space and not from space, which has no units.

Time is the passage of energy whether quanta of material energy or quanta of radiant energy. If we view nature merely on the simplest level the passage has no direction. It is only when we view nature from the whole-point-of-view as entropy and history that the passage has measure and direction. The units of energy which the physicist postulates for descriptive purposes are not apparently affected (barring the relativity effect) by their passage. They may enter into compounds in which new characteristics emerge, but their own character is not affected permanently, at any rate, by the combinations into which they enter. Real duration, in the organic and psychological sense of cumulative growth of the past into the present, is unknown in the physicist's world. Cumulative duration depends upon the peculiar structure of living things, especially the highly organized living things. It is here that we have the duration of habit and memory. Time, as the real passage of events, is bound up with change, whether it be the emergence of something new or the dissolution of the old. The quality of the passage of events depends, not merely upon time and space, but upon the energy structure of the system involved. It is

clear that the passage of events is prior to the spatializing of this passage in terms of chronological systems. The confusion of the temporal attribute of passage with the quantitative measurements of this passage has been one of the outstanding errors of philosophy.

In analysing an activity system we must take account, not merely of the variables, but of the structure of the activity. It is this structure which gives meaning to the activity and which we try to state in a formula. In a world without structure, there could be no thought, and therefore no science. Without cosmic control there would be no measure, no quanta, no patterned activity. It is true, as Kant pointed out so impressively, that if the mind had no structure we could not have knowledge. But it is equally true that if nature had no structure we could have no knowledge. Mind is an individual activity system in nature, and therefore can express nature. From the point of view of evolution, mental structure is a creative adaptation of life to the cosmos.

In activity systems the parts are sensitive, in determinate ways, to one another's presence in temporal and spatial relations. Otherwise there could be no community, but only isolated monads. This sensitiveness of the parts to one another and their mutual determination does not constitute an organism. An organism is a characteristic type of organization and assimilates, grows, reproduces, and interacts with the environment as only an organic type can do. But every system of activity is sensitive to the presence of other systems in determinate ways. Sensitiveness or awareness is always an attribute of activity systems; and since activity is universal, awareness must be universal. There is nothing inert in nature. Sensitiveness characterizes nature at all the levels of organization of energy. This is not animism. We must distinguish between awareness and mind. Mind is one type of activity system, bound up in this existence with a highly complex organism through which it functions. Mental activity systems also possess awareness; but, as with other activity systems, the awareness varies with the situations in nature. Awareness plays about the zone of activity, to borrow

a metaphor from Bergson, and gets its colour and significance from the activity system. We have now defined the five attributes of activity systems, viz. energy, space, time, awareness, and structure.

Qualities are functions or aspects of activity systems in their various actions, reactions, and interactions. There is no sense in speaking of a thing by itself as having properties, for properties are functional adjustments. There is no such entity as a thing in itself. Everything that exists is interrelated in activity systems, and every activity system is sensitive to changes in its field, and every field is interrelated in a determinate way with other fields. The universe is itself a system of interrelated activities controlled by a total cosmic field. Qualities are the ways of things or the appearances of things in various contexts and under varying conditions. By thing I mean an individual activity system. The only clue we have to the nature of things is their way of acting. It is clear that the properties or qualities must vary with the situations in nature, since they are aspects or functions of determinate situations. Sense qualities involve certain organic specializations as part of the situation. But the organic specializations of end-organs and nervous system are as much part of the situation in nature as the stimulus. Sense qualities are physical emergents. But the discrimination of qualities, their abstraction as aspects of things, their meaning in the order of nature is due to mind and the social tradition. Not all properties are sense-properties. There is the immense variety of properties in the various contexts of nature where organisms do not figure—chemical properties, magnetic properties, etc., which are conditioned by the simpler systems involved and their interaction. These various functional relations in nature make a difference indirectly to our sense perception, i.e. we can watch the changes taking place in nature, or they may be noticeable only in their duration over periods of time, but in any case they are inferred to account for nature as we sense it.

Similarity and difference are not properties of nature except as we include mental reactions as part of nature. They belong

to the second order, not the first order, of reality. They are the result of our conscious operations on the appearances of nature. Identity can have precise meaning only in the operations of measurement. Grouping things into classes on the basis of similarity is due to our subjective interest, though the result must be relevant to nature. The relevance has reference to the particular level of perception. Compare, for example, the discrimination of the expert with that of the novice or the discrimination through the microscope with that of the unaided senses. We may group various hues of red into one class or series on the basis of the subjective affinity of our responses to these incommensurable qualities. We may further group into a class of classes all disparate hues of colour to distinguish them from the various qualities of grey; and we may group all the hues and greys into a more complex scheme because they all refer to the causal relations of certain energies in nature to the organ of sight. Clearly such grouping is a subjective affair and secondary to the primary appearances in the causal nexus of nature. Philosophers may hypostasize the classifications into essences or eternal objects, and talk about the participation of the individual appearances in the essences or the ingression of eternal objects into the individual events. Surely this is a trick of language. So-called essences like colour do, indeed, subsist as abstractions in the realm of spirit and enjoy a dubious eternity there, for they are linguistic fictions, the artifacts of mind. They do not exist in nature in the sense that properties do. They are affective responses, while properties are qualifications of certain causal situations in nature (including, in sense appearances, our organism). It is indifferent to the appearances in nature that they strike us as identical, similar, or different, though this may help us to sort them in convenient ways and so improve our adjustment to nature. This function of essences was first made clear by Locke. There is, however, objective structure in nature which mind must recognize; else there could be no approximation in the process of discovery. Between the energy systems of nature there are determinate exchanges. In these exchanges we try to discover constants which we can

track through the exchanges. But the recent history of physics shows too clearly that these constants are pragmatic constants. The real structure of nature is for us a limit which we can at best hope to approximate. Even functional recurrence in the infra-microscopic realm of physics is probably statistical. Our reaction to nature, not nature, is stereotyped.

According to my own empirical realism we take account of reality as it is in our primary relations within nature. In our secondary or cognitive relations, we often err in our interpretations of appearances, but the appearances of which we take account are real. All the appearances of nature in various contexts are on a par, so far as existence is concerned. Our emphasis on some appearances as more important than others is due to our interests. For practical purposes our selection is different from our emphasis for æsthetic purposes. The spatial and temporal appearances, i.e. the appearances of distribution at various distances from us and the appearance of motion with reference to us, are as real as the appearances which we call qualities. Values are real appearances. But they exist only in contexts where desires are involved, for values are satisfactions. We rank values according to importance or worth, but this does not affect their existence. Spiritual qualities are as real as material qualities, and in human life are more important. By spiritual qualities I mean those which we recognize in our social intercourse, including the intercourse with the divine, wherever it is an experience and not just words. We recognize human selves as having an intrinsic meaning and value which we must respect, and which we demand that others respect in us. In other words, we regard selves as ends, and not merely as means. We recognize the striving for truth, morality, and beauty as the unique activity of rational beings. In other words, it is their function to create in accordance with conscious ideals, and not merely to enter blindly into the creative situations of nature. Ideals are creative energies in nature. The distinction between material qualities and spiritual qualities is primary, and not dependent upon our rationalization. We may rationalize the human individual into an organization of electricity, or we

may regard him, as Aristotle did, as having an influx of cosmic creative reason, but the properties which we must recognize in social relations are in any case the same. The activities are real, and they are for us *the* reality. We must deal differently with selves from the way we deal with material things. This conviction cannot be set aside by rationalization. On the contrary, reason, if it is fair, must take account of this difference in trying to piece together its experiences into a consistent whole.

If we conceive reality as activity systems, the great problem is the problem of organization. The organizations of activity, as we observe them, exist in various kinds, degrees, and ranks. These types are not absolute in the local evolution of which we are a part. They emerge in the process. The problem is: Why do they emerge? My belief is that they do not emerge by accident, but by virtue of the relation of our local field to the structure of the larger cosmic field and the genius of the whole. Activity systems maintain themselves by exchange with the environment. Matter cannot give rise to radiations of a certain type unless it is first charged by the patterned activity which it gives out. Hence in a self-maintaining cosmos there must be a constant process of give and take. This means that the types of organization are eternally incarnate in the cosmos, though the bearers vary, and, "like runners, hand over the torch of life."

In any local history, whether individual, social, or cosmic, the cycle runs its course because it is charged by patterned energy from the larger whole. But the response is not a mere repetition of the pattern communicated. The particular history responds to the stimulus in terms of its own structure and duration. The individual emerges as an act of cosmic genius in the appropriate conditions in nature. In the inorganic world there seems to be exact reproduction of patterns. Witness the similarity of the spectra of matter everywhere. But where there is cumulative duration, i.e. where the past is taken up into the history of the individual, the variation of response increases. The living organism becomes less and less dependent upon the immediate stimulus, and lives more and more with reference to the past

and the future. This is evident wherever there is learning from experience, but especially so where there is imaginative memory and anticipation on the basis of memory. The unit of reality at any level is not the instant, but the dynamic whole-pattern of the individual with its duration. It is this whole-pattern which determines selection, assimilation, and response, whether on the chemical plane or the psychological plane.

If evolution is statable in terms of the organization of energy into greater complexity, there will always be a certain amount of relativity about what we call levels or critical steps in local evolution. The origin of living compounds marks for us a critical step of fundamental importance, though if we could have followed the stages in the evolution of nature we should probably have found it difficult to fix upon the critical moment. In some respects the evolution of the multicellular organism with its co-operative parts and forward-looking pattern is a more significant crisis than the simplest beginnings of life. What strikes me as the most momentous crisis is the appearance of creative reason, with its reflective analysis and synthesis. For this cannot be accounted for in terms of mere duration, however complicated. Creative reason cuts across the past and the present alike. It substitutes ideals or limits for custom. It marks the beginning of true freedom. Sensation, habit, memory, even the response to similars and kinds, may be routine. Creative thought marks a radical change in our response to nature and to man. It reconstructs experience in accordance with its own demands. Aristotle is right that here we connect with another order of reality, a spiritual order, the creative reason in the cosmos.

When we take the emergent point of view and follow the successive organizations of matter, through ever more beautiful complexities, it seems as though each later step in the series followed naturally from the preceding. We are especially inclined to invest matter, the lowliest emergent organization of energy, with greater and greater potencies. Mind itself becomes a function of matter, or at most a speculative hypothetical limit. Everything seems part of nature's routine. How different when we view the process from the point of view of creative spirit! In

the communion of mind with mind, in language, art, and institutions, matter has merely instrumental significance. The supreme reality is the meeting of spirit with spirit in a unique synthesis with its emergent properties and values. As we view nature from the point of view of spirit, the process of evolution, i.e. the process of organization, is seen as a process of spiritualization. As we follow the beauty of each stage of organization down to the atom and electron, the problem becomes to find matter. It is now matter which becomes a limit, the only significance of which is that it is the potential stuff for organization or spiritualization. The realm of matter and the realm of spirit are the two great realms, and it is the realm of spirit which overlaps. Here we have the great contrast. Matter spends its energy in radiation, spirit grows rich by expression. The more it spends the more it has. If it spends nothing, it dies. Therefore, it is more blessed to give than to receive. Matter is the realm of routine as contrasted with the free creativeness of spirit.

Matter is essentially a medium of exchange. It must become charged with patterned energy to give out patterned energy. Eventually, when the local expenditure exceeds the supply, the local matter goes the downward course. This does not mean absolute loss of energy. The energy which is expended here finds elsewhere a centre of reaction where the process of integration may start anew. This is implied in the conception of the cosmos as a going concern. The material energy is constant, but its distribution varies. In this redistribution, energy is communicated as patterns or whole forms; and these, in the adventures in space-time, give rise, in accordance with the local conditions, to a new cycle—as the communication of patterned energy in biological conception gives rise to a new generation of the type of the preceding or nearly so, and as the patterned energy of society produces, in successive generations, greater or less conformity to the established type.

The cosmos, viewed as a whole, does not come into being or pass away. It is self-sustaining. It has a constant structure. Not only is its energy, viewed in the abstract, constant, but

its levels or types of organization are constant, since energy is communicated as patterned energy. Evolution is a local process in which the material cycle runs its course, in unique response to the patterned energies communicated from part to part within the whole, under the guidance of the spirit of the whole. The patterned energies, which are communicated from more advanced systems, furnish the impetus to advance. The individual response, however, is due to the character of the individual system, and not merely to the impetus from outside. Hence there need not be individual repetition. This becomes increasingly true with the emergence of life and its unique duration. Over and above the routine of nature there is creative spirit, ever present in its own right and in its own kind—a unique realm of energy which exists, not by division but by unity, not by dissipation but by expression. This creative spirit gives meaning and order to nature's routine, and in the fullness of time incarnates itself into the flesh of mother earth to produce a new kingdom of order and value. Matter and spirit remain the two fundamentals. Of these, spirit gives organization, life, purpose, meaning, worth to the process. Matter furnishes the raw material and inertia. Transformed by spirit its random motion is standardized into patterns, and becomes meaningful and beautiful so far as its inertia permits. Without spirit, it is mere weather.

It is the tendency in present thought to emphasize science as the exclusive method of apprehending reality. Far be it from me to minimize science. It has vastly enlarged our conception of reality. But we have seen that at best science leaves us with abstract systems. It cannot, as science, give us back the unique reality of individual activity. Science must be rooted in the primitive convictions which furnish the background of thought and be supplemented by, and integrated into, the intuitions of concrete reason in moral, æsthetic, and religious activity. These intuitions must furnish the goal of scientific activity itself. It is in our moral, æsthetic, and religious experience that we grasp the individual significance of things and selves and the spirit of the whole. The world of values has its place in the scheme of the

whole as well as the world of existence, and in the final analysis the two are inseparable. This must be true if we accept a spiritual control as the guiding field of activity. The world of values has its structure as well as the world of facts; and in our view of evolution the structure of value is the structure of fact. The structure of beauty is the structure of the cosmos, and science is really a pursuit of beauty, if the cosmos is dominated by spirit. In a broad sense the cosmic process is an æsthetic process, for the realization of pattern is an æsthetic realization. Spirit increasingly dominates matter and gives soul to matter, until emergent spirit wins its freedom and uses matter as its instrument in its expression of the ideal—the ultimate cosmic pattern, which in the imperfect process figures as a limit. There is, however, always the inertia of any level to the charge of a higher dominant pattern, and so we have the problem of maladjustment and evil.

The love of form, which is the individual inspiration of the scientist, the moralist, and the artist, points to the same objective order which in religion reveals itself as the great companion and enters into vital communion with those who are devoutly disposed. The genius of the cosmos creates in love and inspires the reciprocity of creative love. Being a free creator it seeks to bring to birth free creators. Its service is perfect freedom. It does not despise matter, but uses matter affectionately as the instrument of creativeness. But matter at best is a transient and imperfect embodiment of spirit. The creative genius which spiritualizes nature does not emerge in nature's cycles. It has its own individual life of infinite richness and value. It has its eternity in the life of spirit—in the ever-present cosmic spirit, which incarnates itself afresh, as the individual permits, in the cycles of matter, and in the continuity of emergent spirit within the economy of cosmic spirit. Here worth is the test of survival, and that survives which has sufficient prospective realization, in other words, which can enter into the freedom of creative spirit.

In a world in which spirit lives and works, the free realization of the category of worth, as set by the spirit of the whole, is

immortality. But in a pluralistic world of interaction and freedom there may be damnation as well as salvation. We determine what the world shall be for us in the world of values. Whether our individual life is worth living or not, whether the pessimistic or optimistic outlook is justified, whether we are free creators or creatures of circumstance, whether damnation or salvation shall be a fact, as far as we individually are concerned, is a venture of faith. The structure of value is eternal, but our participation in it lies in our own control. To choose freely to realize, in our individual lives, the beauty of spirit is the great affirmation; to refuse to do so is the great negation.

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A PHILOSOPHIC MIND IN THE MAKING

By HAROLD CHAPMAN BROWN

Born 1879; Professor of Philosophy, Stanford University, California.

A PHILOSOPHIC MIND IN THE MAKING

It is difficult to decide with what age an intellectual autobiography should begin. As the twig is bent so the tree grows and mental habits and directions of interest acquired at a very early age distinctively condition later development. My father and mother were omnivorous readers and both delighted in reading aloud, so that before the age of twelve I was familiar with far more literature than is generally required for college entrance, an overweighted portion of it poetry. They had something of a passion for complete editions. To read Scott, Dickens, Carlisle, or Macaulay meant to read their complete works. This "all or none" law of reading got its hold on me early and is still manifest in my behaviour, for I am still distinctly uncomfortable when I have to read some but not all of a philosopher's writings and frequently prefer to read none when time forbids reading all rather than face the mental uneasiness omissions entail.

In reading, everything was grist that came to my mill and philosophy happened along a few months before my fifteenth birthday. Rummaging in the garret among some old books of my grandfather's on a snowy February afternoon a copy of Sir William Hamilton's *Metaphysics* fell into my hands. As an old school lawyer and judge, grandfather believed firmly in Metaphysics as the best intellectual training for a lawyer. Hamilton had been his standby and the thorn in the flesh of all young men who entered his office, of whom my father, after Williams College and the Harvard Law School, had been one. The word "metaphysics" was wholly strange and with adolescent imagination I suspected it might be so because of some socially disapproved connotation. It might even be something naughty and taboo. The only way to know was to find out for myself, so the book was conveyed with much stealth to my room below and secreted amongst the paraphernalia of a toy theatre not yet put off with other childish things.

Leisure time for the next few months, and there was much of it, for I was not a sociable youngster, was spent poring over Sir William Hamilton. It did not take long to discover that

Metaphysics was something eminently respectable, at least as far as pornographic standards might be applied, but whatever disappointment lay in that attribute of it was atoned for by the fact that it was almost unintelligible and totally different from anything I had ever read. My difficulties were enhanced by the fact that I had acquired the meaning of 'prodigy' for 'phenomenon,' I think from Nicholas Nickelby, an interpretation that gave Sir William some weird turns. Much of what was understandable, at least partially, seemed obviously untrue, so I approached father at the end of my task with the question, why people wrote meaningless and untrue things in books. His answer led to a confession, and much amusement on his part, but the amusement was kindly and the upshot was the suggestion that I have a try at the more modern Herbert Spencer.

Neither my father nor my mother was philosophically minded, and I think both their philosophical and religious beliefs could be fairly well covered by Socrates' utterance "that no evil can happen to a good man, either in life or after death." Nevertheless, the volumes of Spencer's *Synthetic Philosophy* were provided for me in due order and I got through them after my fashion before entering college at eighteen. Also, true to the all or none law, I completed Hamilton's *Logic*, which still stands before my mind as an almost perfect form for lectures unaccompanied by text, and his *Discussions of Philosophy and Literature*. Some zest was added to my reading of Spencer by conversations with the family dentist, Dr. C. T. Stockwell, himself the author of a little philosophical booklet, *New Modes of Thought*. Indeed, for a time I developed quite a flair for the dentist's chair. Alas, it has not survived! But Dr. Stockwell was very kind and spared me much time in helpful talk.

A few months after my father's sudden death, Williams College claimed me by family tradition, and the Harvard Law School loomed vaguely in the future. In anticipation college meant three things: the opportunity to study French literature, about which I had somehow become curious; to find out more about philosophy; and to explore mathematics, a love for which had been inculcated in me by a very remarkable high-school teacher. Of course there

was a stated curriculum to be followed that only permitted increased freedom of electives as the years went by. The curriculum never bothered me very much, however, for it was possible then, as now, to pass most courses by a few hours' application before examinations, and the library had been provided by some thoughtful alumnus with large, comfortable, leather-covered Morris chairs from which the bookshelves were easily accessible to him who would seek solace there. That library was my home for the next four years. I was still, and perhaps more than ever, a social misfit. The required curriculum did teach me the genius of Homer in collecting irregular verbs that I can still conjugate, although I have mostly forgotten their meanings, and I acquired some skill in the application of my room mate's motto καταψευδεῖν καλῶς, which we translated "a good bluff well swung availeth much." Unconsciously I followed James's dictum that one should do something every day that he does not want to, sufficiently to "get off" requirements without too much pain to myself or contumely from my teachers, but I hardly won their admiration.

For two years a student could take no philosophy, but I read whatever came to hand in not too big sets and pestered the noble seniors and juniors of my fraternity with questions and discussions usually aimed at setting them against their class work. I remember Flint's Theism, taught with due piety by the President, Dr. Carter, was a pet aversion. When in the junior year I could first elect philosophy, Professor Perry was the *locum tenens*, omniscient in my eyes with his new Ph.D. from Harvard. I then and there decided I'd try some day to know as much as he did—if I did not decide to become a mathematician or devote myself to the writing of French poetry. Bad habits stick, however, and I'm afraid I was not an impressive student even in philosophy, for my business at hand was then a reconstruction of Leibniz in a more satisfactory form, and course requirements only occupied the interstices of my time. Professor Russell returned the next year and I laid the great Leibnizian achievement before him, a rather unsatisfactory effort as I remember it, but very kindly received. From that time Professor Russell never failed

to aid and abet me in following my own interests in spite of the limitations of courses, at a cost to his time and strength that I appreciate now far more than I did then.

In French and mathematics, the gods were with me. When the offerings of the college's limited mathematical curriculum were completed, Professor Ferry let me go on by myself and be credited with work on Burckhardt's *Functionen-theorie*, the German, of which I then knew nothing, learned incidentally, and Reye's *Geometry of Position*. From time to time written reports were turned in as the spirit moved, and when puzzled, there were evening discussions in Ferry's rooms beginning with mathematics and ending about 2 a.m. It is a wonder he could stand it, but those evenings were among the brightest spots of my college career; and somehow Ferry had the gift of teaching everything else along with mathematics. Incidentally I read Appell's *Éléments d'Analyse Mathématique*. It connected somehow with Leibniz, or seemed to.

French fell under Professor Morton, a supremely conscientious teacher of grammar but a cultured gentleman with fine æsthetic sensibilities, a philosopher, and a student of cultural history. It did not take long to see that he hated grammar and composition as much as any of us, but I got from him such a strong sense of a great beyond that it was not impossible to grasp inclination by the scruff of the neck and master the elementary nuisances for the sake of the future. The reward was the entrée of his home, much interest in the interplay of philosophy, literature, and art, and an awakened interest in cultural history.

College evoked two special interests not incorporated in my anticipations. A sophomore requirement in physics effected a consuming interest in the theory of light, not as complicated a matter in '99 as now. For a semester I did little but study light, and I think I read everything on the subject in the not too extensive library. Physics was then the thing, and light in particular. However, the rest of the course suffered somewhat from this preoccupation with a single part, and after somewhat curt advice to stick to assignments, physics began to go the way of Novalis's Sophie, the career of a physicist to the realm of Platonic

Ideas. However, the fascination of the subject has never quite vanished, although it is becoming desperately difficult to keep in touch with its modern developments.

The other interest that unexpectedly emerged during college days grew out of an intense longing for companionship. The American college is not ideal for a boy who is really enthusiastic for books. He is a misfit and herded with other misfits. This led me to an intense interest in human behaviour and to devour psychology, both normal and abnormal, but with comparatively little resultant light for my real problems. Why were individuality and personal initiative dreaded unless devoted to socially sanctified ends? Why do men gain popularity by being a little more like the crowd than the rest of the crowd? What is the source of the power in catch-phrases and college spirit? I tried to solve these problems, even in those pre-Freudian days, by a sort of psycho-analytic method and kept elaborate note-books, now, perhaps fortunately, lost. Prior to this time books had been a means of escape from life, but now they took on a new value as means to an understanding of life. Ever since, I have been impatient with those theories of philosophy, or anything else, that pose as mere gratification of curiosity for curiosity's sake.

It was a relief to escape from the fetters of college custom and collegiate types to the independence of the graduate school at Harvard. Chesterton, I believe it is, says there is more affectation in eating corned beef and cabbage on principle than caviare from taste. The joy in not being obliged to pretend interest in football games or simulate enthusiasm at rallies! Perry had wiped from me, quite unconsciously on his part, the last whisperings of the call to carry on the family legal tradition, but I was not quite sure whether mathematics or philosophy would take its place. The first year of graduate work shows a divided course. Mathematics fell under James Mills Peirce, a fine old man, who taught me a great deal about the stage and the drama, but whose great days as a teacher of mathematics were over. The second-year philosophy was wholly in the ascendant.

It is impossible to recount all the influences of a great graduate school and this was almost the heyday of Harvard's. Still I was

not a good course man, and I am sure I never evoked much interest from Santayana and was a distinct disappointment to Palmer. Charming as were Palmer's lectures, I was not ready for ethics and my work was very superficial. James was then ill and taught only one year during my sojourn at Harvard, an elementary course that, as a graduate student, I attended but did not take for credit. He was accessible to us, friendly, and I felt his personality and believed in him but I knew his ideas better from his writings than from personal contacts.

My range of interests was still somewhat narrow. The philosophy of mathematics, philosophy of science, logic, algebra of logic, history of logic, and metaphysics, were my choices of subjects. The others were necessary evils. And there was always that impulse to try to understand why human beings behave as they do, but the psychology of the laboratory, like that of the books read at college, had little to do with this. Harvard came to mean primarily three men, Josiah Royce, E. V. Huntington, and E. B. Holt. Huntington, whom I had known and admired during his short sojourn at Williams, was then engaged in his studies of systems of postulates for mathematical systems and he helped me over many bumps on my road. Holt gave me perhaps the greatest thing I got from Harvard, a sense of the importance of grasping the specific meanings of statements. He is almost the only man I have ever known who has never let me get away with a statement not quite understood, and whom I think I always understood until he wrote the *Concept of Consciousness*, a book I have never been able completely to master. From Holt also came the first insight that there is a psychology or physiological psychology that can actually contribute to an understanding of human nature. How many of my philosophical ideas were derived from him then and in later years I do not know, for we have discussed all subjects, and he has the faculty of making ideas appear in me so that I cannot tell whether they are his or mine.

Of the Harvard years, the greatest direct influence was Josiah Royce, as much by opposition as by assent. The dialectic method always put me on my guard. As I should now formulate my

conviction, it is that words get their primary meanings from experience with the things they denote. The connotative definition is an attempt to formulate the results of this experiencing. When the defined word is made an element in a dialectic development, there is always the danger that some neglected aspect of the facts may become relevant to the situation under discussion and falsify the conclusion. I feel safer now, as I did then, when I can maintain some sort of contact with the conditions that give rise to terms and check conclusions by them. Royce's "world of description" was very much to my mind, but his "world of appreciation" seemed to be a cover for something that needed further analysis. From Royce also came the notion that however much a philosopher might know about philosophy, it was also of extraordinary importance for him to know other things as well. It was under his influence that I began a broad course of scientific reading that has been continued to this day. The very method of his seminar in which men of the most diverse interests were gathered together gave a sense that nothing could be alien to philosophy, although sometimes his linkage of subjects, while always clever, was a bit forced.

Royce—and I think this grieved him a little—sent me out from Harvard well started on the road to pragmatism. This resulted from trying to clear up for myself the problems of the new mathematics of number theory and the problems of Russell's Principles of Mathematics which had just appeared. A year of my work, taken in Germany just after my marriage, and prior to my Ph.D., did little but get me acquainted with another type of life, give me some mastery over German, introduce me to a few philosophers of a different sort, and let me read Prantl's *Geschichte der Logik* and Shroeder's *Algebra der Logik, in toto*.

From Harvard I passed to my first position at Columbia and to the most strenuous seven years of my life. The problems of a young instructor with a growing family, no great financial sense, and illness were upon me and led to a program of teaching that mounted during my career to twenty-four hours a week. I think I hold a record in giving the standard course in elementary deductive logic seventeen times in one year. It was

not great teaching nor was any of my work there such as I should now be proud of. However, there did come a certain facility of speech and a partial mastery of a characteristic timidity that still annoys me in speaking before a strange audience or a class I have not met before, and sometimes holds me tongue-tied at association meetings, especially when a little tired.

Nevertheless, the Columbia days were great days and I cannot begin to trace the ideas that germinated there in my conversations with my colleagues and friends. Woodbridge's lectures impressed me by their sanity of view-point and excellence of style, even when a little oracular. From him came a gentle but continuous pressure to write which was partly resented, for I had almost persuaded myself that I should get my ideas thoroughly matured before laying them before the world, and yet greatly appreciated, for I knew half-consciously that if I did not keep writing I would never get to writing. Bush was an omnivorous reader and was always presenting me with something I should have read and discussing it with great common sense. Montague's dialectic skill awed me a bit and I must confess to being often a little frightened by an impassioned fierceness with which he conducted an argument. However, it was not long before I knew him too well to fear that a bite would follow the bark, and I owe much to the pressure of meeting his vigorous criticisms. Also Montague gave me my first vital interest in social philosophy.

The really great intellectual influences of my Columbia days, however, were Professor and Mrs. Dewey. Beset by personal and practical problems, it was Mrs. Dewey who, although so far as I know she never set up to be a philosopher, made me see that these problems could be looked at with profit from a philosophical view-point, and it was Professor Dewey who engendered in me the belief that such problems were not a mere dissipation of time but a precious source of knowledge. From him I got a new vision of bridging the gap between abstract scientific problems and living, a bridging that is of infinite value to me in teaching and will, if anything, lend vitality to such philosophy as I may produce. Poincaré was a favourite author, and it was very impressive to me that the psychological insight of James, the mathematical learning of Poincaré, and the educational experience of Dewey had all led to philosophies that have so much in common. What was lacking in all was a sort of metaphysical background. It could not be metaphysics in the Idealists' sense, nor a direct transcription of science, but an attempt to get at, through scientific knowledge, a conception of a universe that would sanction that knowledge and furnish some sort of perspective for approaching normative problems. The desire to attain some such metaphysics has guided almost every study I have undertaken since that day.

The vicissitudes of my career as a pedagogue put often in mind a remark of Professor Perry's, made back in the Williams days, or perhaps at Harvard: The best way to learn a subject is to try to teach it. To this I added my own emendation: Never voluntarily put anything into a course that a student can read just as well in a book. The first real plunge was a course in Æsthetics that fell to my lot through the unexpected resignation of Dr. Pitkin. At the time my only idea of the subject was the somewhat vague one derived incidentally by studying the history of philosophy, and a remark of Royce's that somehow had stuck in my mind, that he never could see there was much of philosophic value in æsthetics anyway. However, Pitkin turned over his notes to me, and I went at it. The notes were chiefly concerned with techical analyses of the arts and I stalled a bit with the history of æsthetics. Gradually, since I have always kept the course, there began to take shape in my mind a special formulation and development of the problem. The guiding influence was Tolstoi's question, what is there about art that makes it worth the time and money expended on it, and Guyau's very suggestive title, "L'art au pointe de vue sociologique."

Unconsciously a Deweyan method seems to have dictated its development. First the inquiry, what were primitive peoples trying to do when their activities resulted in something we call art. Then the search for a point of transition when some valued resultant not primarily premeditated should appear from such activities that had sufficient importance when seen, to lead to

modification of the procedure in order to conserve and enhance it. Here the clue came from Miss Harrison's *Ancient Art and Ritual*. From this point my problem was easily formulated: What features of a work of art are capable of affecting the observer, and how? What is the nature of the observer that he can be so affected and brought to the state of mind intended? What prompts the artist to create? And what is the social significance of the fact that observers are so affected by works of art. The search for answers to these questions was the first broadly synthetic philosophic task I ever undertook.

The æsthetics has been of major importance for the rest of my philosophical development. In the first place it confirmed me in the use of a sort of historico-genetic method that I had already employed in an effort to discover what mathematical statements really meant, how we get from simple counting to abstract number theory and from land measuring to geometry. Secondly, it led me to look upon all specialized human activities, religious, moral, political, and intellectual, as specializations of more general ones due to the chance discovery of some value in a phase of them that led to that phase being isolated and perfected for the realization of that value. This is, of course, Westermarck's and Dewey's approach to ethics. Lévy-Bruhl, and this does not mean assent to all his theses, generated the suggestion that normative thinking, logic itself, might also have emerged as a result of similar discoveries in the use of natural psychological capacities. For some years I have been struggling with the problem of the discovery or invention of intelligence and believe I have met with some slight success. The problem solved would furnish a much needed prolegomenon to Robinson's *Mind in the Making*.

In the third place, the æsthetics compelled an approach to the study of human nature from the emotional rather than from the intellectual side. Indeed, the psychology of thinking never really gripped me until the question arose of understanding the significance for the individual and for society of human lives emotionally enriched through æsthetic experience. The most unsatisfactory aspect of Professor Dewey's *Experience and Nature*

is that he had first formulated in his mind an independent theory of knowing, then discovered the importance of affective life, and tried to bring them together as the flour and shortening of the bread. In general, the neglect or the sentimentalization of the feeling life seems to me the greatest weakness of our scientific age and its philosophies.

My psychological materials have largely been derived from behaviourism, the Watson with whom one talks rather than the sometimes irritating Watson of the Press, from the physiologists, and from Freud, who gave me some important clues as to the nature of the drive of creative imagination. This does not mean that I am ready to stand for behaviourism or Freudianism as systems, but is merely to indicate that I have found more true and useful materials for my purposes in writings of these schools than in others; but I have no prejudice against utilizing genuine discoveries by anyone, introspectionist, behaviourist, structuralist, functionalist, Gestaltist, or Eidetiker, if they serve my turn.

Another unexpected result of interest in æsthetics was a renewed interest in the history of philosophy. From Cornford's dangerously brilliant book, *From Religion to Philosophy*, came the suggestion of an anthropological genetic approach to the subject that took root in the soil prepared by the Æsthetics. The history of philosophy ceased to be a story of the errors of the human mind, perhaps occasionally salted with true insights, but the history of individual men elaborating their attitudes toward the world about them in intellectual interpretations restricted by available knowledge and shaped by some socially transmitted thought model. The term *model* is due to Rignano, the conception of the influence of socially transmitted models to Cornford.

At about this period of my development a sneeze wafted me from Columbia to Stanford. Not to be cryptic, an attack of scarlet fever, caught from a sneezing student, kept me for a summer in New York and led to my meeting Professor Stuart, who invited me to Stanford. This move led me to continue the teaching of the history of philosophy with a growing conviction of the importance of the approach that I had conceived. Probably,

by the way, the idea of this approach could have been gotten from Dewey, but while I can hear of such things from others, and approve them, for them to take on real vitality for me, I must arrive at them by my own road. The course has never pleased me, for it did not take long to discover that the scholarship necessary to carry out the task in the desired fashion was the work of a lifetime, and not an avocation for a pedagogue whose most vital interests were in other problems. Also, all current histories and texts are woefully inadequate for such an approach.

Stanford also gave an opportunity to continue working on æsthetics, and best of all the opportunity to institute a course on the philosophy of science along such lines as pleased my fancy. The initial idea was to review the basic conceptions of sciences: physics, chemistry, biology, psychology, and anthropology, from the point of view of asking the metaphysical question, What sort of a reality would sanction such scientific interpretations? From the first the materials were wholly readings in science, with no attention to the extant philosophies of science. My own philosophical development, and most of what I have since written, has been the outgrowth of problems that appeared in connection with this course.

The development into a philosophy has been slow. In the first place the astounding and unexpected development of physical-chemistry that was just taking shape at the time of my removal to Stanford in 1914, and the wealth of new material that has appeared almost in monthly *quanta*, has furnished a challenge that demanded a retention of flexibility in conclusions. It is only recently that I have begun to feel the inception of a position that can both comprehend actual findings and leave room for further inevitable modifications and corrections. But, like Russell, I am still hesitant about the significance of the *quanta* theories and their results. In the last few years I have been trying my conclusions out against such books as C. D. Broad's, Bertrand Russell's, Whitehead's, and Alexander's, but until I was pretty sure where I was going I never looked into any of these, except Russell's and Whitehead's mathematical philosophy, and I was

pretty well advanced in the interpretation of mathematics in the early Columbia days.

These remarks are not to be understood as preparatory to claiming any originality or priority of ideas. Such questions have never had the least interest for me. Civilization depends upon the free offering and acceptance of truths whatever their sources. It can permit no patents. Obviously acknowledgments, when possible, are pleasant courtesies, but in philosophy especially the form of the assimilation of an idea is almost as important as the idea itself. Frequently both idea and its use are suggested by the difficulties of other philosophers who have missed out somehow. Our chief acknowledgments should probably be to the errors of others, but perhaps the most subtle form of flattery is to have our ideas ascribed to distinguished philosophers, whom, to our shame, we have never read. However, the thrill of such flattery is usually short-lived, for attention to the ascribed source usually shows that we, or it, have been completely misunderstood.

Retournons à nos moutons. The concept of levels early suggested itself as a way to link together the fields of the different sciences. I think the idea came while reading Auguste Comte, and I first heard the term used in a lecture by Spaulding at Columbia. It has been a useful and illuminating conception, but its newer forms, in connection with the doctrine of emergence, are utterly foreign to me. The current popular attempt to view cosmic history under a disguised version of Herbert Spencer's ponderous formula, a progress from an incoherent, unstable homogeneity to a coherent, stable heterogeneity, always recalls Royce's demonstration that the reverse process is equally characteristic of reality. There can be no doubt that, whatever we mean by the term entity, where certain structural features occur, certain characteristics of the entity are present, and that the structure of some entities can be expressed in terms involving simpler orders of entities in such fashion that the characteristics of the more complex can be seen as consequences of the characteristics of the simpler when structurally combined but not identical with them. In this sense these latter characteristics may be said to have emerged, but they can also demerge if the structure

characterized by them is disintegrated. This is quite in accord with Professor Woodbridge's contention that matter means structure.

Emergence becoming cosmology is a typical example of philosophical emotional perversity, the use of emotion as a substitute for thinking instead of as a stimulus to thinking. In the light of our present knowledge it is as easy to think of the universe as statistically identical as to think of it as having a directional course—that is, some stars are becoming hotter and their atoms disintegrating; others are becoming cooler and heavier atoms are being formed. There seem to be limits in both directions, for the heavy atoms become radioactive and disruptive to their neighbours also, and the limits of disintegration seem to be in proto-hydrogen. Solar systems and stars may both be generated and destroyed as appendages to processes taking place in different parts of the cosmos. All objects, as Broad says, are strands of history; but the cosmos, as we now know it, may be either a history or a statistical identity—that is, may contain at each moment samples of approximately all potentialities. The almost Spinozistic trend of modern physics suggests the latter. In our ignorance we can do little more than follow Aristotle in the belief that each thing is at its best when it is doing most fully that of which it is capable and busy ourselves with seeking more light. Mind is certainly a specialized detail within the complex whole and not an object of cosmic striving.

The biological and physiological aspects of nature have also been difficult to interpret in a satisfactory philosophical fashion, but the difficulty has been not so much from changes in data as from a certain poverty, or better, a one-sidedness of them that neglected aspects of problems concerning which a philosopher needs information. Bergson's *L'Évolution Creatrice* gave me a real thrill, although I could never sympathize with the neo-vitalistic movement. It seemed essentially a mystical development, and mysticism is for me the imaginative satisfaction of an emotional urge replacing empirically sanctioned observation. Nor was his stressing of the term *intuition* congenial, for that word usually covers poverty of analysis. Yet mechanistic biology of the older

type, such as Jacques Loeb's, always appeared to be lacking in something. This discrepancy has been partially overcome in my opinion by the application of the principle of levels. This principle leads to the conception of organic sub-structures functioning as wholes according to descriptive laws that are foreign to mere physics and chemistry, but are rendered possible by physical and chemical processes binding together their elements.

For some time my biological reading was chiefly along the lines of T. H. Morgan's investigations, but the chromosomes and the genes persisted in explaining too much. It was impossible, as the theory used to stand, that the differences in individuals of the same stock that do occur could occur. Also it seemed to set the organism in too great opposition to its environment. It was not until the recent appearance of Child's *Physiological Foundations of Behavior*, with its conception of growth as a form of reaction to and partly determined by environmental interactions, that I began to grasp a philosophical conception of the organism that appears to me now to be in accord with observation, not contradictory to the discoveries of the scientist and harmonious with the conceptions of the physical world derivable from the other sciences.

Psychological conceptions are always a stumbling-block to philosophers. The greatest confusions I find in the contemporary British philosophers, Russell, Broad, Whitehead, and Alexander, result from a wholly inadequate psychology. I have always felt a certain irrational joy at Auguste Comte's omission of this subject from his list of the sciences on the ground that its problems belong partly to physiology and partly to sociology. Perhaps this is not wholly true, but at least the physiologists are beginning to tell us a good deal about those physiological structures that make human behaviour what it is, and the behaviourists are telling a good deal about the characteristics of that behaviour. Those who devote themselves to the description and classification of mental processes—the introspectionists—even if their methods are justifiable or justified, do not seem to have added greatly to the sum of knowledge. For a time Freud loomed large on my horizon. I tried very hard to get inside of the doctrine and look at the

world through its eyes—the method Royce laid down as best fitted to give understanding; but the world so seen did not fit very well with the world as lived in, so I gradually emerged with about as much Freudianism left as is contained in Holt's *Freudian Wish and its Place in Ethics*. I owe part of my rescue to my colleague, Professor Stuart, who has hauled me back by penetrating criticism and kindly ridicule from more ill-considered acceptances of half-illuminating ideas than he probably realizes. He has often made me lots of trouble, for which I have been very thankful afterwards, and has frightened me out of many literary projects that I should have later bitterly repented.

The most difficult problem my philosophy of mind has had to face hangs upon the interpretation of sense qualities and imagery. For both, the whole position developed demands the discovery of specific physical or physiological structures that are "qualitied"—Mr. Alexander's term—by them. It is easy to make hypotheses, but difficult to get hold of crucial tests of their validity. Long before reading Alexander I had tried to think through his supposition that all sense qualities are characteristics of structures in the extra-organic physical world, but that hypothesis is difficult to reconcile with the facts of sensation. Also, I have tried the hypothesis that sense qualities pertain to qualitied structures within the organism, with consequent difficulties in understanding our sensing of an external physical world. The most satisfactory hypothesis seems to be that some sense qualities, probably colour and sounds, are qualitied states of extra-physiological structures that can be reproduced as a result of physical processes as qualitied states of certain organic structures; and others, temperature, taste, smell, and the like, are qualitied states of organic structures only, but may be produced under the influence of specific sorts of contacts with external matter.

Images also require some physical or physiological qualitied structures. I am sure that neither sense qualities nor images can be qualitied brain events. Only recently, in Hollingworth's *Psychology of Thought*, have I found a sanction for what I have for a long time speculatively held and suggested as an hypothesis to my students, that the image is nothing but a qualitied organic

state, specifically located in a sense organ or muscle, that, by the mechanism of the conditioned reflex, has replaced natural conditions as the innervator of an action pattern formed under their influence. Such a qualitied structure may, as in the case of the visual image, be similar to a qualitied character of the situation represented, or, as in the case of "sub-vocal" speech, be wholly different. Such qualitied states become images through their acquired capacity or conditioning to represent something other than themselves in innervating engrams.

It is pleasant to agree with Mr. Alexander that our spatial and temporal perceptions are not derived from the characteristics of sense qualities, but it is disturbing, as in the case of Bergson, to find him taking refuge in intuition. Spatial and temporal perceptions are clearly related to the consequences of our experiences in acting. I cannot forget a chance remark of Dewey's, that experiencing means *trying out*. It seems to me their sense data are those intra-organic sensations that arise in the course of our innervations preparatory to seeking something far or near, to the right or left, above or below. They are closely analagous to those innervation sense data that lead us to expect an object to be light or heavy, wet or dry, hot or cold, on the basis of a mere visual distance contact.

Alexander's mental quality is a pure mystery to me. Perhaps it is lacking in my make-up, but when I approach a specific instance in which I am conscious of something, James's method of getting an understanding of abstract terms, I find nothing but, say, a clock ticking on my table, organic qualitied conditions as the ticking tends to produce movements contrary to those necessary for writing, and a slight unpleasantness, irritability, as a feeling tone. My content of consciousness is primarily a juxtaposition and partial fusion of these qualitative conditions. I wonder whether the so-called mental quality may not be suggested by a half-discerned recognition that sensory response is always accompanied by the qualities due to empathic responses that Langfeld so well interprets in the case of contacts with works of art? The total qualitative condition characteristic of the organism in such a situation is a composite, like the taste of a beefsteak

in which taste, tactile, temperature, and olfactory qualities are fused, a fact that justifies us in speaking of a pleasant day, a fearful storm, or a horrible monster. I do not understand the neglect of the consideration of empathic conditions and their significances by both psychologists and philosophers who are concerned with the problem of the nature of mind.

This is no place for a full presentation of a philosophy of mind, but there is one point I cannot willingly pass over. Psychology is much too preoccupied with the stimulus-response concept. At any moment there are myriads of stimuli and only certain of them motivate the dominating patterns. This fact is too readily brushed aside as due to intensity, habit-shifting interest, or something of the sort. As Bergson pointed out, the animal organism is an accumulator of stored-up energy that it releases more or less explosively. It is driven to find outlets, and "stimuli" in actual practice, as opposed to laboratory conditions, do little more than provide opportunities for release. The direction of the release is determined generally, not by the nature of the acquired engrams, but by some state of metabolic unbalance, involving an energy level that we call mood. We can be too buoyant for a book to exert appeal, too depressed to respond to humour. We may go out of our way to find trouble. In one state I quietly watch a fly crawling over my hand, in another I gently brush him off, and in another I attempt a vicious attack. It was Kempf's *Autonomic Functions and the Personality*—and Kempf is quite aware of the peculative character of many of his theses—that gave me the first suggestion of the importance of autonomic functions. I believe now that all spontaneous and all deliberated action is motivated by problems of autonomic adjustment under conditions imposed by the demands for action in a given environment. My main argument for stressing the social importance of art is that our empathic responses to works of art have their immediate effect in effecting autonomic readjustments, that result both in modifying the direction of our thinking and the persistency of our endeavours. There is more than a little truth for me in Poincaré's rhapsody, in which he makes the effects of contact with the beautiful the basis of the impulsion to scientific advance

and the source of the triumph of the Greek civilization in Europe.

As sufficiently behaviouristic to see truth in the statement that thinking is sub-vocal speech, at least in so far as it implies that words are the chief images used in thinking, language takes on a special philosophic importance. I am ready to "enjoy" the irony of Mr. Russell by casting my lot with the Patagonians and others for whom the sentence is the psychological unit, always remembering that a child may treat a word as a sentence where his elders would not. Jespersen appears to be the most thoughtful of the philologians, and his suggestion is that sentence structure arose out of the disintegration of a holophrastic speech. I have been greatly influenced in my conception of language by him and by inferences drawn from Boas's *Handbook of American Indian Languages*. If the relation between speech and thinking suggested by the behaviourists has truth, there ought to be some relation between the structure of a language and the mentality of its habitual users. I like to think that I can see some such relations in the case of the French and the Germans, but the relation should be far more manifest if one could get in contact with the thought of those using some language outside of the European group and based on a quite different structural plan. It must be confessed that I have as yet failed to get assurance as to such differences, although I have sought for them from Chinese, Japanese, and Hindu students with whom I have been thrown in contact. Anthropologist friends, although they approve the principle, fail to produce satisfactory materials for evidence.

My social, moral, and religious philosophy is still at its infantile stage. It is still anthropological—that is, still seeking to find out what human practices have been in these fields and what men believed they were getting out of them. I think I can see fairly clearly the emerging aims of differentiating moral and religious striving, as I have that of æsthetic striving, but I am as yet far too ignorant of the details of the processes involved to place them in their proper perspective in human life. Hence I cannot yet claim any general social philosophy, unless it be a philosophy of education, and here I am so much under the influence of

Professor Dewey that I doubt if my ideas are more than a repetition, with possibly some elaboration, of his.

I am quite sure that our schools and universities are on the wrong track in their efforts to teach. If I were a Mussolini of the state of education, my first decree would be a death-sentence on anyone using the verb "to educate" in any other than a reflexive usage; I educate myself, you educate yourself, etc. It seems to me that the school and the university should merely be environments peculiarly adapted to the arousal of curiosities and providing means whereby a satisfaction of them can be found. This is, of course, the program of the "Schools of To-morrow." The university, and all higher education, differ only in the fact that the curiosities there aroused must be evoked largely through books and be satisfied through books, always provided students have been taught to read.

The lack of ability to read is the greatest handicap under which those of the present generation that come to the university are placed. They have, of course, learned to repeat words; to give definitions of them, sometimes; but to use words as a medium to direct thought to real situations, and to live those situations in imagination through the help of words, is generally beyond their powers. The textbook that can be memorized and the formal definition are the curses that hold them down. I do not mean there is nothing that needs to be remembered or defined. The situation that a problem defines discloses many features to be remembered and taken account of, and a definition may help to clarify it; but to one who succeeds "in walking around the idea and looking at it on all sides" the formulation of the definition or of the facts seen can be made in many different word groups. The student who can use only one of them does not usually know what he is talking about. This is as true in philosophy as in science, and I think the philosopher, especially the dialectician, is rather extraordinarily prone to play with such word groups, taking definitions as rules of the game, with the result that he often attains a sort of very beautiful and complicated analogue of a chess problem solution rather than a vital philosophy.

If teaching is impossible, what becomes of the professor?

Ideally the university becomes a dwelling-place of scholars, each so vitally interested in the problems of his field that he inspires others with his interests and shares with them his labours. Under actual conditions there must be lectures in which he talks about his field and tries to communicate a feeling for its significance and interest. To my mind such "courses" might well be required, but should carry little or no credit. Unsolved problems lying in the offing need not be concealed or tentatively solved. Those deriving interest from such lectures may then enter upon a more intimate relation with the lecturer, in which they see how he is working at his materials, and be encouraged to try their own hands at the work. Then with growing experience they can be entrusted with their own problems and irregular consultations and opportunities to discuss difficulties or results. Under present conditions, unfortunately, something of the task-master attitude is still demanded.

Discipline is not without value, but occurs in its best form when it becomes necessary to perform an uncongenial task for the sake of succeeding in a congenial one, as the study of German grammar may be essential to getting information that may help to solve a problem in literature, philosophy, or science. Our wretched habit of letting a textbook or a teacher(!) tell a student everything he is expected to know (say again) is utterly subversive of attaining this sort of discipline. I have no patience with the full pitcher and empty glasses theory of education, nor with the artificial discipline of enforced cramming. My friends in departments of education tell me that the inferiority of those who are willing to become teachers and of most of those who seek education makes any such programme as is suggested above unworkable. I do not believe them. Is this the dogmatist overriding the empiricist? I do not think so, for the plan is justified by what I know about human nature, although the principle of selectivity involved might alter somewhat the groups seeking higher education, perhaps even diminish them; but I suspect in the long run, if thoroughly developed, it would have quite the opposite effect.

Philosophy, as I have written in published papers, justifies

itself as supplementary to science by developing an integration of knowledge that can lend coherence and confidence to human aspirations and ideals. A metaphysics is merely the set of basic principles on which it rests. As such it is essentially a product of maturity, but its actual articulation may proceed in either of two directions. The philosopher may first formulate his metaphysics and rationalize his views of life accordingly, or may first develop his practical philosophy and elaborate his metaphysic as needed. In each case there is probably a partly conscious foreshadowing of the other part. Even when the metaphysics takes precedence in the *opera*, there seems to be throughout it a foreshadowing of the attitude towards life involved; and when, as seems to be the more modern fashion, an integration of the attitude towards life precedes, as with Dewey or James, the metaphysic is always hovering in the offing. These two elements should mature together in the mind.

Academically this need generates difficulties, for our scientific predilections demand early published research. In philosophy such research is likely to lack perspective and so exhibit an academic character and lack of vitality that may be noted in much contemporary philosophy in America and indeed in the whole modern world. The scientist can take his problems piecemeal, the philosopher must solve his synthetically. The scientific spirit now dominates, and philosophy suffers accordingly. The young philosopher must imitate scientific procedure, so unless he has a happy faculty of forgetting his formulations of conclusions and a sufficiently courageous ego not to fear charges of inconsistency, his synthesis either never arrives or is a mere formalism in which his heart is not present. Professor James used to say that ideas came to him as the charcoal sketches of pictures and that the detailed filling in arrived gradually. Certainly no picture could be produced by dividing the canvas into square inches and completing each one as a special problem. Perhaps our young philosophers should be encouraged to try their hand at broad general essays and mature their early work through specialized studies later.

Our educational system also tends to foster a distinction between

the scholar and the teacher. There have been discussions as to the advisability of classifying professors as teachers or research men, and schools of education seem to be gradually adopting a new form of the Ph.D. to distinguish those who merely wish to know the meaning of what they drill their victims to say from those who want to be able to handle the facts with which they deal and perhaps find out something more about them. I think the distinction is wholly vicious. There is, of course, a difference in the ability of men in getting others to share their interests, and some extraordinarily able investigators should never try to give popular lectures or elementary courses. Comparatively few of us have the intellectual power and the emotional drive to really produce significant advances of knowledge; but unless a man has the thrill from the subject-matter with which he deals that makes him feel it all important and fills him with personal ideas about it, he has no place in an educational institution, even the most elementary. The attempt to grasp the importance of a subject to the progress of civilization is itself a sort of research that concerns even the most elementary instruction. In so far as valid, the distinction between the teacher and the investigator is the distinction between those who are thinking about the social significance of their subject and those concerned with the increasing discoveries in its field. Both are researchers, for all thinking about a subject is research, unless we narrow the term to include only the attainment of notably successful results, a thing not necessary for all fruitful educational contacts. Hence every scholar must believe that his subject is *the* indispensable element of a curriculum, as, of course, philosophy is.

With this view of the teacher and the life within a university, it is obvious that my philosophical development cannot be disentangled from my classroom work. To my elementary students I owe the pressure to keep my thought in touch with the problems that confront all men in their adjustments to the demands of life, to hold my abstractions to the outgrowths of concrete needs, and to avoid unclearness. To those more advanced, there is a debt for criticism and for raising difficulties overlooked that have to be met. There is little that I have written that has

not first been inflicted on some group of students with enough care to produce at least a good semblance of understanding. Thinking before an audience is easier for me than before a typewriter, and the too carefully prepared lecture almost always fizzles. To be interested in my subject and intent on making a few points usually leads to success and an extension of the thought, whether utilized on the spot or matured in private afterwards.

Prejudices? Yes. Sully Prudhomme says somewhere: "Un homme n'est pas un artist si, chez lui, aucun sens n'est particulièrement délicat, si certaines couleurs, certaines lignes, certains sons ne l'affectent pas comme des caresses ou des blessures." If I might parody him, I should say, no man can be a philosopher if, for him, no outlook on life is particularly dear, if certain ways of thinking, attitudes toward facts and beliefs, do not affect him like caresses or wounds. For myself, I believe "citius emergit veritas ex errore quam ex confusione," and I should prefer to be proven wrong and acknowledge my error rather than be praised for the profundity of ineffable insights. The concrete particular instance as a check to generalization gives me a glow of comfort. Yet I fear dialectic and the preeminence frequently accorded to logic. The purely intellectualistic philosopher turns me to ice, for our intellectual processes are only instruments used by our organisms in maintaining or recovering vital intra-organic correlations that are ever and anon threatened by the vicissitudes of the world to which it belongs—that is, our problems arise as emotional conflicts and are practically solved when we recover the peace that passeth understanding, the σωφροσύνη of the Charmides. Mere intellectualism, could it exist, would have the horror of a Frankenstein.

I am also prejudiced against the anthropocentric perspective in metaphysics. Man is essentially a part of nature, and his peculiarity is, as Pascal saw, that he thinks; but I am prejudiced against the prejudice that mind is the master work of cosmic process. As was indicated above, the earth with its living organisms appears in cosmic events as a mere by-product. In the evolution of living forms, man is one specific occurrence. In his acquired capacity to anticipate the future and to modify environment to

suit his needs rather than suit himself to environment, he seems to excel all living creatures. But for all we know the natural processes of evolution may produce some organism with more numerous or more subtile senses and with a more delicately balanced nature that may acquire a mind vastly superior to his, or, on the other hand, his present organic balance may be too delicate to persist and he may become extinct through disease or more directly by his own acts. I cannot see why the universe should be deeply stirred in either event. The absence of man with his mind, or an electron with its field of force, would undoubtedly make the universe different; but to assume that that difference is of importance to the universe is to endow the universe with thought and feeling—a truly primitive anthropomorphism.

Yet in another sense philosophy must be anthropocentric. The philosopher himself is a man, and to man the potentialities of his mentality are of prime importance. He must make himself at home in the cosmos. But he is not what he would be, nor is his environment as he would have it. Even the Faust who hails the fleeting moment: "Oh, still delay—thou art so fair," is a prey to the living discontent inherent in the possessor of mind. Contentment lies only in change, and human changes involve the kind of participation called mental action. Mentality demands knowledge that futures may be anticipated. It creates art that its emotional problems may be adjusted and their solutions shared. It weaves moral codes so that men can extend their achievements through co-operation. It invents gods as a spur to its aspirations. The philosopher is mentality engaged in evaluating the forms these achievements have attained and remoulding them for the better articulation of the impulses inherent in the human variety of the living organism.

A philosophy is, therefore, in its core a program for a way of living from which emanate specific directional tendencies of thinking, feeling, and willing. In a measure Fichte was right in challenging men to acknowledge their philosophy and show the sort of men they were. We demand consistency and truth of philosophies merely because inconsistencies and untruths seem to be obstacles to the realization of what is peculiarly human

in our potentialities as living beings. A science that is true and consistent would be wholly adequate, but a philosophy that is merely this and nothing more may be insignificant. Indeed, historically, where truth or consistency have been in a measure lacking, significance has often cast its halo on a philosophy and raised it to a place of high esteem. If it is true that there is no great contemporary philosophy, it is perhaps because philosophers, in a scientific zeal to be accurate in their dealings with data—a wholly commendable effort in itself—have neglected to develop the significance of their results. Philosophies far more acceptable to scientists than Bergson's have far less philosophic weight.

This is the story of the making of a philosophic mind, although to one who reveres philosophy as I it is almost unbearably arrogant to characterize myself as such. May it be understood as Saint Paul's "earnest of the Spirit in our hearts." What has been given is but the outline of a philosophy, a sketch that the future may see transferred to canvas, for it is now sufficiently matured to be entrusted on that journey toward life or toward oblivion that is the great adventure of any articulated philosophy. What that chapter will hold only "the Law that abides and changes not" will disclose.

> For strangely graven
> Is the orb of life . . . . . .
> And men in their millions float and flow
> And seethe with a million hopes as leaven;
> And they win their Will, or they miss their Will,
> And hopes are dead or are pined for still;
> But whoe'er can know,
> As the long days go,
> That to Live is happy, hath found his Heaven!

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THE PHILOSOPHICAL *CREDO* OF AN ABSOLUTISTIC PERSONALIST

By MARY WHITON CALKINS

Born 1863; Professor of Philosophy and Psychology, Wellesley College, Wellesley, Mass.

THE PHILOSOPHICAL *CREDO* OF AN ABSOLUTISTIC PERSONALIST

By way of preface to this formulation of my philosophical *credo*, I must state unambiguously that by 'philosophy' I mean 'metaphysics'; and that I use 'metaphysics' in roughly the following sense: the attempt, by reasoning, to know what is ultimately real. It will be observed that the words 'by reasoning' mark off philosophy, thus conceived, from mysticism; and that the phrase 'the attempt' admits the possible failure of any metaphysician in his quest.

This use of the term 'philosophy' does not, of course, interfere with my unconcerned acceptance of that academic convention which turns over, to supposedly competent members of departments of philosophy, instruction in ethics, logic, and æsthetics. Primarily, however, ethics and æsthetics and old-fashioned formal logic seem to me to be divisions of psychology, mainly distinguished from rigidly descriptive psychology first as explicitly normative, as demanding the valuation of the objects of their study, and second as practical, as demanding the application of psychology to conduct, to artistic production, and to scientific method. It follows, to my mind, that if philosophy were merely a covering term for ethics, æsthetics, and logic, one or all, there would be no faintest justification for a specific department of philosophy or for an association of philosophers as such: rather, we philosophers should be sorted out and assigned, some of us to general psychology, some to history, government, and economics, some to this or the other of the arts, some to the physical sciences or to mathematics.

Obviously, this conception of philosophy as metaphysics sharply opposes two other conceptions greatly in vogue to-day. The first of these is logical atomism of the Bertrand Russell type, the theory that "logic is what is fundamental in philosophy."[1] The second is the doctrine brilliantly set forth by John Dewey that philosophy is the enlightener of "the moral forces which move mankind" and that the "task of philosophy is to clarify men's

[1] Cf. *Contemporary British Philosophy*, vol. i, p. 359.

ideas as to the social and moral strifes of their own day." Thus conceived the history of philosophy is as Dewey points out "a chapter in the development of civilization and culture . . . a living picture of the choice of thoughtful men about what they would have life to be and to what ends they would have men shape their intelligent activities."[1] I cannot too unequivocally state my conviction that Dewey here proposes not the reconstruction, but the abandonment of philosophy. He may be right or he may be wrong about the value of metaphysics, but he is not justified in the identification of philosophy with a socialized ethics.

I

My philosophic *credo* is made up of four articles. The first of these may thus be stated: The universe contains distinctively mental realities; it may or may not also contain non-mental entities, but in any case irreducibly mental realities exist. I am eager to point out that by this conviction I associate myself with metaphysicians of many points of view, not merely with out-and-out idealists, such as Berkeley, Hume, Hegel, Royce, and Pearson, but with dualists, classic and contemporary, of many sorts, with Descartes and Locke, with Pratt and Sheldon, for example—in a word, with philosophers of every type who assert or admit the existence of mental entities or qualities. I call special attention to the fact that the group includes upholders of the contemporary doctrine of emergent evolution. For these writers hold that though mind has emerged from a "lower level of existence, . . . it does not belong to that lower level," but is rather a "new order of existent with special laws of behaviour."[2]

There is evidently only one metaphysical doctrine inconsistent with this basal conviction that mental realities exist. This is materialism in the broad old-fashioned sense of the term—what

[1] *Reconstruction in Philosophy*, 1920, chapter i, pp. 25–7.

[2] S. Alexander, *Space, Time and Deity*, vol. ii, p. 46[2]. Cf. A. O. Lovejoy, "The Meanings of Emergence and Its Modes," *Proceedings of the Sixth International Congress of Philosophy*, 1927, p. 30 (reprinted in the *Journal of Philosophical Studies*, 1926, ii, p. 176[2]); and C. Lloyd Morgan, *Emergent Evolution*, especially Lectures I, II.

is nowadays often called naturalism, or behaviourism, or monistic realism. Anti-mentalism would be an unambiguous term to cover all forms of this doctrine that so-called mental realities are reducible to non-mental; the theory that consciousness is a function of a non-mental organ, the brain; the doctrine that thinking is, like golf-playing, a material bodily reaction[1]; or finally the teaching that consciousness, like physical qualities, reduces ultimately to a non-mental 'neutral stuff.'[2] I, however, ally myself with the great majority of philosophers in asserting the existence of mental realities and in consequent opposition to the materialistic reduction of mental to non-mental. My frankly empirical reason for this conviction is that I directly experience mental phenomena. I know immediately what perceiving, imagining, feeling, and willing *are*; and I know as immediately that the subvocal contraction of throat-muscles in pronouncing a word, say 'justice,' is a phenomenon distinct from that of 'thinking' justice, though the two phenomena are closely correlated. Because I encounter mental reality, directly experience it, realize it as somehow significantly different from what I observe as bodily process or physical reality, I assert its existence.

II

The second article of my philosophic creed carries me a step further and separates me from a few of my former companions—from Hume, from Karl Pearson, from Ernst Mach. It embodies the conviction that mental realities are ultimately personal, that the mental phenomena which I directly observe are not percepts, thoughts, emotions, and volitions, in unending succession, but rather perceiving, thinking, feeling, and willing self or selves.

[1] For an example of contemporary materialism, cf. Alexander's doctrine that reality, categories included, is spatio-temporal (*op. cit.* i, 183, 189 ff, 246[1] *et al.*). Note the inconsistency of Alexander's repeated statement that every existent is "expressible *without residue*" in terms of a lower order of existence, with his emergence-conception (*op. cit.* ii, pp. 45 ff. Italics mine).

For statements of the behaviouristic position, cf. J. B. Watson, *Psychology from the Standpoint of a Behaviorist*.

[2] Cf. E. B. Holt, *The Concept of Consciousness*, pp. 103, 106, 110. Cf. also Bertrand Russell, *Analysis of Mind*, pp. 25[2], 121[2].

With William McDougall, I hold that it is impossible to "find . . . 'an idea' or 'a sensation' lying about loose in the world. . . ." One might as well "expect to find 'a falling' or 'a movement' without something that falls or moves as 'a perceiving' or 'a remembering' detached and isolated from the subject who perceives or remembers."[1] And this conviction once more is based upon the appeal to immediate experience. Even Hume has implicitly admitted the existence of the self whom he overtly denies, by such expressions as his famous, "I enter most intimately into what I call myself," and even more significantly by his teaching that both 'necessary connection' and 'identity' are cases of the 'transition of the mind.' For obviously 'transition' can be attributed only to a continuous being and is an utterly meaningless term as applied to a string of momentary 'mental phenomena'—to mere impressions or ideas.

Through direct observation I have thus gained two convictions: first that mental realities exist; second, that every mental existent is either a self or a part, phase, aspect, or process of a self. Obviously, this experienced self must be studied, analysed, scientifically described. The outcome of such study may very briefly be summarized: it is the conception of the self as a complex, unique, more-than-momentary (or persistent), yet changing entity, conscious of (and so related to) an environment. These characters, it must emphatically be restated, I directly experience and do not merely infer. In recognition, for example, I am conscious of myself as persisting, as the same self who earlier perceived this same object; in rebellious volition I individualize myself, set myself up against other selves, realize myself as unique. In feeling and perceiving I am conscious of myself as passively related to my environment, whereas in willing and in affirming I am aware of myself as in active, creative relation to surrounding objects.[2]

[1] *Outline of Psychology*, 1923, p. 40.

[2] I cannot date with precision my adoption of the personalistic point of view; but I feel sure that it is the outcome of my study and teaching of psychology during the 'nineties. A particularly influential text was the famous ninth chapter of James's *Principles of Psychology*, in which he declares that "the universal conscious fact is not 'feelings and thoughts

III

With my next step forward, I break fellowship with many who, up to this point, have been my companions. For my philosophy is, in the third place, unambiguously idealistic, that is mentalistic.[1] I hold, in other words, not only that the universe whatever else it contains includes mental realities, but that the universe is through and through mental in character, that all that is real is ultimately mental, and accordingly personal, in nature.[2]

i. It will be expedient to elaborate this conception before considering the arguments against and for it. The chief question at issue is evidently that of the nature of the physical world. How is it possible to conceive of comets, and rocks and dandelions as mental? And, if we so conceive them, how can we account for the empirically realized distinction—a distinction sharply stressed by our argument against materialism—between brains and bodies and indeed all physical objects, on the one hand, and experiencing conscious selves on the other. Idealism offers two solutions of these problems: first, that of Berkeley, followed in our own day by Pearson[3] and Mach[4], which reduces the physical

exist' but 'I think' and 'I feel'" (p. 226[2]). An article, "Psychology as Science of Selves" in the September 1900 issue of the *Philosophical Review* is my earliest published avowal of the personalistic standpoint in psychology. For later statements of it I may refer to my "A First Book in Psychology," to a series of papers in the *Journal of Philosophy*, 1908–9, and to two later papers, "The Self in Scientific Psychology, *American Journal of Psychology*, 1915, xxvi, pp. 495–524, and "Converging Lines of Contemporary Psychology," *British Journal of Psychology*, 1926, General Section, xvi, pp. 171–9.

[1] I use this barbarous term in the interest of clearness, for the term 'idealism' is nowadays sometimes narrowed in meaning to designate first one, then another, form of idealism in the wide sense—to refer to Berkeleian idealism, for example, or else to absolute idealism; and again 'idealism' is used to cover an essentially dualistic conception of a world of persons and things regarded as alike ideal because significant parts of a significant world order (cf. J. E. Creighton, "Two Types of Idealism," *Philosophical Review*, 1917, xxvi, p. 515[2]).

[2] My first teacher in philosophy, Professor Charles E. Garman, started and guided me in the line of thought which culminates in an idealistic philosophy.

[3] Karl Pearson, *The Grammar of Science*, chapter ii, § 12, pp. 65–6.

[4] Ernst Mach, *Analysis of Sensations*, Open Court edition, 1914, p. 22[2].

world to a system of ideas; second, that of Leibniz, Royce, and Ward, which conceives the physical world as made up of selves of an extra-human type. Either doctrine is theoretically possible; but I adopt a form of the Leibnizian conception chiefly because the results, speculative and experimental, of modern science seem to me more readily translatable into its terms. Accordingly, I think of the physical world as an extension, downward, of the obviously social world made up of human beings and of the 'higher' animals. I conceive the conscious selves who constitute the infra-human world as like myself in my inattentive, dazed, inactive, sleepy states. And the sharp contrast which unquestionably I observe between so-called physical and psychical reality I conceive, after Royce's fashion, as the significant distinction between uncommunicative and communicative selves. In other words, I contrast selves, or persons, with physical objects not on the ground that the selves, and not the things, are conscious, but on the ground that the selves, and not the things, are in actual or possible intercourse with me. In Royce's phrase once more, I conceive of physical nature not as 'unconscious,' but as 'uncommunicative.'[1]

Against two misconceptions of this personalistic nature philosophy I must briefly guard. It is not, in the first place, a return to pre-scientific animism, for it does not interpret every recurring sense-complex as sign of an individual self: I do not, for example, assert the existence of a specific leaf-self indicated by that complex sense experience described, ordinarily, as perception of a leaf. Rather, I hold that this experience may indicate merely one part or aspect of an infra-human self, or again a whole group of such selves—in other words, that one part of a leaf or else a cluster of leaves, and not the single leaf, may constitute the 'bodily sign' of a self.

A personalistic nature philosophy is not, in the second place, as is often implied, incompatible with the conception of scientific law. For the old mythical view of natural law as inexorably compelling, non-mental power has long since given place to the conception of scientific law as the statement of a repeatedly

[1] *World and the Individual*, vol. ii, p. 225[2].

observed, generalized, and justifiably predicted sequence of phenomena. The phenomena in question may at least as well be mental as non-mental. In fact, Herbert Jennings—a biologist, be it noted, not an idealistic metaphysician—says explicitly that scientific laws consist in predictions of the following type: "When you have such and such experiences, you will have such and such other experiences."[1] Obviously, scientific laws, thus conceived, have a place in a personalistic nature philosophy.[2]

ii. From this rough sketch of the personalistic conception of the universe, I turn to the argumentative support for the doctrine. I base my idealism squarely on Berkeley's fundamental position: the insistence that what any man unchallengeably knows—what he knows, in other words, without any element of hypothesis—is himself and his experiencing, clearly a mental reality. But contemporary realists, in so far as they do not cavalierly ignore Berkeleian idealism, persist in 'refuting' it—not by a criticism of this consideration but by an attack on two subsidiary arguments, Berkeley's relativity argument and his demonstration that if the secondary qualities are mental, so also are the primary qualities.

The realistic 'refutations' of these arguments vary in conclusiveness. As regards the second of them: Nunn and Whitehead and others certainly show without difficulty that Berkeley proves merely that 'all our sense perceptions are in the same boat and must be treated on the same principle,'[3] and that accordingly Berkeley's argument, effective as it is, in opposition to Descartes and to Locke, does not avail against the conception of the secondary qualitites as themselves non-mental. Against Berkeley's relativity argument—his contention that an 'external' object must be mental, not material, because it is immediately per-

[1] "Doctrines Held as Vitalism," *The American Naturalist*, 1913, xlvii, pp. 392–3.

[2] On all this, cf. Leibniz, "Monadology" and "The Principle of Nature and Grace"; James Ward, "The Realm of Ends," Lectures III and X; Royce, "The World and the Individual," vol. ii, Lecture V; and my paper on "The Personalistic Conception of Nature," *Philosophical Review*, 1919, xxviii. pp. 130 ff.

[3] A. N. Whitehead, *Concept of Nature*, p. 44[2].

ceived as possessed of opposite qualities (of heat and cold or of sweetness and bitterness, for example), contemporary realists counter as follows: they simply abandon the conception, fundamental to Berkeley's destructive argument, of material things as stable objects of perception and teach instead that external things have no fixed and permanent characters.[1] Thus, bluish green, bluish grey and blue are, in Pitkin's phrase, at one and the same time and place the "real physical colours" of a given hillside.[2] The usual mentalistic criticism of this realistic doctrine points out the precariousness of those theories of perception advanced by the realists, in place of the conventional view which they abandon. But although I believe these criticisms to be amply justified, I shall not take them up in detail.[3] For the truth is that the realistic opposition to these two Berkeleian arguments is entirely irrelevant precisely because no thoughtful idealist, from Berkeley down, rests his case upon them. One sometimes indeed suspects that many contemporary realists take their Berkeley at second hand, else they could not overlook his whole-hearted admissions of this point. A good example is his comment on the relativity argument: "It must be confessed," he says, "this method of arguing does not so much prove that there is no extension or colour in an outward object as that we do not know by *sense* which is the *true* extension or colour of the object."[4] In truth, Berkeley invariably puts "the whole upon this issue": the fact, already stressed, that the external object, as known by any man is always an experience of his own. "If," says Philonous to Hylas, "you can conceive it possible for . . . any sensible object whatever . . . to exist without the mind, then I will grant it actually to be so."[5] And to Hylas's eager reply: "What more easy than to conceive a tree or house existing by itself

[1] It is only fair to add that the self-styled "critical realists" oppose this doctrine.

[2] "Implications of Biology" in *The New Realism*, p. 463[3].

[3] For statement and criticism of these different theories, cf. Durant Drake, "The Approach to Critical Realism," in *Essays in Critical Realism*, pp. 15 ff; May Sinclair, *The New Idealism*, pp. 71 ff; and my *Persistent Problems of Philosophy*, fifth edition, 1925, pp. 413 ff, 423 ff.

[4] *Principles of Philosophy*, xv.

[5] *Dialogues between Hylas and Philonous*, i, Everyman Edition, pp. 232 ff.

independent of, and unperceived by, any mind whatsoever," Philonous responds by insisting that it is a "contradiction to talk of *conceiving* a thing which is *unconceived*." In the end, Hylas, the realist, admits that he has been making "a pleasant mistake enough. As I was thinking of a tree in a solitary place," he concedes, "where no one was present to see it, methought that was to conceive a tree as existing unperceived or unthought of, not considering that I myself conceived it all the while . . . And this is far from proving that I can conceive [it] *existing out of the minds of all spirits*." To be sure, Hylas, closely followed by the neo-realists of our own day, goes on to urge that, despite this fact that known trees and houses turn out to be percepts, images, or concepts, it is none the less impossible categorically to deny the existence of unknown objects; but Philonous, who represents not only Berkeley but modern idealists, shows without difficulty that such alleged unknown realities are utterly negligible, mere nothings, no more to be asserted than denied.[1]

I have postponed to the end the consideration of what seems to me the crucially important difficulty in idealism. As has already appeared, I discount most realistic criticisms. Either they assume the existence of extra-mental reality; or they attack only the subsidiary arguments for idealism; or they ignore the fundamental idealistic position; or they are guilty on all these counts. But contemporary realism has sent one pointed shaft into the very heart of idealistic doctrine. This is Moore's contention that according to the fundamental idealistic argument (by which the idealist "discovers" every alleged non-mental reality to be one of his own experiencings) other selves as truly as material things reduce to the thoughts or imaginings of the idealist, losing all independent reality of their own. In other words: Moore argues that the idealist, on his own principles, directly knows only himself and his own experiences and has no right to infer from the latter the existence of any person save himself.[2]

[1] *Dialogues between Hylas and Philonous*, ii, Everyman Edition, pp. 256 ff. Cf. my *Persistent Problems of Philosophy*, p. 418.

[2] Cf. G. E. Moore, "The Nature and Reality of Objects of Perception," in *Proceedings of the Aristotelian Society*, 1905–6, vi. Moore's position is summarized in *The New Realism*, pp. 6[2] f, 146[2]. It is of interest to note

In my opinion only three rejoinders to this serious argument lie open to the idealist. (*a*) He may, in the first place, accept solipsism as the only arguable metaphysical position. But as a matter of fact no philosopher seems ever definitely to have grasped this horn of the dilemma. (*b*) The idealist may, in the second place, adopt the standpoint of the pluralistic personalist—of Leibniz and Ward, of Richardson and Burns. He may hold that he directly knows himself as a responsive, not a solitary, mental being, and that he justifiably conceives his environment as like-natured with himself. With Ward, he may believe that "Man only knows the world as he . . . interacts with it and . . . finds it intelligible. And finding it intelligible, he can only conclude that it is not, after all, an alien Other, but has its ground and meaning either in another self or in a community of selves."[1] (*c*) This uncritically pluralistic type of idealism I am, however, unable to accept, since it is, by Ward's own admission, without 'philosophical justification,'[2] or, in Richardson's phrase, a mere 'hypothesis.'[3] And yet I believe that idealism, of a third sort, may escape solipsism by the doctrine of the Including Self. The argument of this absolutistic type of idealism runs thus: In that direct experience of myself which is, as yet, the only immediate certainty I have admitted, I am aware of myself as, at many points, involuntarily limited, thwarted, and hampered. But this direct awareness of myself as involuntarily limited involves and includes the direct consciousness of something-which-is-in-some-sense-outside-me. The two assertions seemingly contradictory,

that Berkeley himself recognizes a difficulty for the idealist in that knowledge of other selves which everyone believes himself to possess. For Berkeley lets Hylas exclaim: "If you can conceive the mind of God without having an idea of it, why may not I be allowed to conceive the existence of matter notwithstanding that I have no idea of it?" (*Dialogues between Hylas and Philonous*, iii, Everyman Edition, p. 267). Unquestionably, Berkeley evades the consequences of this criticism by his quibbling distinction between 'notion' and 'idea.'

My conviction of the significance of this argument I owe once more to Professor Garman, who, by his vivid setting forth of the position, made me for many months a firm, though unhappy, solipsist.

[1] *The Realm of Ends*, Lecture II, p. 28.

[2] *Ibid.*, Lecture IX, p. 200[2].

[3] C. A. Richardson, *Spiritual Pluralism*, p. 63[2].

yet each made with immediate certainty, that I am conscious (1) of limit but also (2) of somewhat-beyond-the-limit are reconcilable only if this somewhat-other is conceived as a greater self of which I constitute an identical part. In fully knowing myself I therefore know the nature of that including self which is, from one point of view, other than I, because greater, but which, since I am actual part of it, also is a greater myself.

IV

(1) The culminating article of my philosophical *credo* is embodied in the assertion that the universe literally is one all-including (and accordingly complete) self of which all the lesser selves are genuine and identical parts, or members. To this conclusion, I am driven by varying considerations. The first of these has just been disclosed in the defence of my personalism. As I have tried to show, to account consistently for my own experience I must regard myself as included in a greater self. And this Greater Self, unless all-including, must (by a similar argument) itself be included in a still-greater self. In a word, only the conception of myself as identically part of an all-including self can reconcile the two experienced facts: (1) all that I know is myself in my own experiencing yet, (2) I know myself as limited by somewhat-in-a-sense-beyond-me.[1]

Another road to the acknowledgment of Absolute Self has two distinct stretches. (*a*) Of these the first is the inference from the occurrence of relations to the existence of Absolute Being. This argument starts from the fact of the experienced relatedness of events and things. On this point, like every absolutist, I am at one with my pluralistic critics. But whereas the latter accept without further metaphysical probing the fact of relatedness, with other absolutists I insist on explaining 'relation,' on pressing

[1] Royce's arguments from the implications of ignorance and of error to the existence of Absolute Self, may be regarded as specific cases of this argument from the awareness of involuntary limits. For statement of these arguments, cf. "The Conception of God," *Address by Dr. Royce*, edition of 1897, pp. 18 ff, 46 ff; and *The Religious Aspect of Philosophy*, chapter xi; and my *Persistent Problems of Philosophy*, pp. 451[2]–2[1].

the question: precisely what is the nature of the alleged relation between any two terms? I find that only three theories of relation are advanced. (1) By the first a relation, *R*, is a part, a character, of one or both the related terms. But this, the pluralistic 'internal relation' conception, has only to be stated to be instantly rejected. For if *R* is from the start contained within a term-to-be-related, *m*, obviously *R* cannot also play the rôle of relating, or linking, *m* with another term, *n*, external to it. In a word, nothing can relate or link two terms which is itself part of either of the terms.

(2) The second of the pluralistic theories, the so-called external relation theory, does not encounter this difficulty. It is the doctrine of contemporary pluralists which conceives the relation, *R*, not as itself a part of the unrelated term or terms but as distinct from, external to, the terms to be related. Thus, the pen is one thing, my hand is another, and the spatial relation which connects them is a third entity. It follows, according to the pluralists, from this externality of the relations to the terms related, that things are now related and again unrelated. (The pen, for example, is not always in the grasp of the hand.)[1] But there is certainly a difficulty in this everyday conception of relation. For the alleged relation, *R*, which is conceived as external link between the terms *m* and *n*, is itself a third entity and, far from relating *m* and *n*, it has itself to be related to each of them. In Bradley's phrase, a so-called relation, external to given terms, can be 'nothing' to them.[2] It is simply another reality, a *tertium quid*, itself implying an unexplained relatedness to each of the terms *m* and *n* which it supposedly relates. And accordingly the search for relations involves us in an infinite and hopeless regress.[3]

(3) In the face of the failure of these pluralistic theories of relation, I find no resource save in the absolutist doctrine that the ultimately real relations are those of whole and part, of

[1] Contemporary realists, as everybody knows, conceiving knowledge as a kind of relation, teach that things are sometimes known and again unknown.

[2] *Appearance and Reality*, p. 32.

[3] Absolutists and pluralists alike too often overstress the infinite-regress consideration. Really, it is a mere corollary from the basal difficulty: the fact that a truly 'external' relation is inherently incapable of relating.

including and being included. The beings of the universe are, from this point of view, all of them parts of some including entity, and are thus related to each other only indirectly. The apparently external relations between things, people, and events are useful fictions based on the conception, contrary to reality, that such things, events, and people exist in ultimate independence and not rather as included parts.[1]

And now that I have come so far I inevitably go the last mile with the absolutist, agreeing with him that, however many the wholes or including entities, each must constitute a part of an ultimately all-including being, the Absolute. For any lesser including entities must themselves be related, seeing that they are (to say the least) alike and different; and thus, by the very argument just outlined, they must be parts of an all-including and self-related being.

I am well aware that most present-day philosophers, urged on by William James, L. P. Jacks, F. C. S. Schiller, and others, cry down this absolutistic argument as abstract speculation or futile 'logic-chopping.' But contemporary *Gestalt*-theory seems to have made this cavalier dismissal of the doctrine impossible by its experimentally grounded conception alike of thoughts and percepts and of physical objects as *Gestalten*, or configurations, unified wholes of subordinate parts, not mechanically added sums of independent units. A melody, for example, is, according to this view, a *Gestalt*. It includes a series of successive tones but it is not constituted by these tones, is not a mere aggregate of them, as is proved by the possibility of transposing the melody, thus losing all the specific tones but retaining the individual structure of the melody. In a word, the *Gestalt* is precisely the 'including whole' of the absolutist; and the Absolute is no more nor less than the supreme *Gestalt*.[2]

(*b*) This argument from relatedness, it must at once be admitted, leads me to the acknowledgment not of Absolute Self but merely

[1] On all this, cf. W. Stern, *Person und Sache*, pp. 147 ff, 165 ff, 256 ff.

[2] For a brief exposition of the *Gestalt-Theorie*, with references to the literature, cf. my "Critical Comments on the *Gestalt-Theorie*," *Psychological Review*, 1926, 33, 135–58.

of Absolute Being. In other words, through this argument I gain no knowledge of the nature, mental or non-mental, of Absolute Being. When, however, I combine the outcome of this relation-argument, for the conception of the universe as absolute, with the argument already outlined[1] for the universe as mental and therefore personal, then there emerges the well-grounded doctrine of the absolutistic personalist. The fusion of the two conclusions, the universe is personal and the universe is Absolute Being, precipitates the doctrine that the universe is Absolute Self.[2]

ii. In the remainder of this paper I shall try first, to tell what I mean by Absolute Self and second, to consider some at least of the difficulties involved in the conception. (*a*) By Absolute Self *as absolute* I understand, in the first place (1) all-including self: no shred of reality however trivial, however futile, however base, can be outside it. There can be no lazy motion of a moth's wing, no whirl of dust along the highway, no stab of joy, or throb of pain, or groping question which can fall outside the Absolute, the all-including being. A corollary from this doctrine is that the Absolute is ultimately changeless. A changing being, Bergson's life current for example, may indeed be conceived monistically as including all lesser entities, but as changing it has an irrevocable past, which is no longer, and a genuine future, which is not yet, and it cannot therefore be thought to be literally all-inclusive.[3] By Absolute Self, as absolute, I mean also (2) a One or unique Whole of parts, not a sum of ultimately independent entities; I mean a *Gestalt*, not an aggregate. Somewhat as a circle defines

[1] Cf. Section II of this paper.

[2] It is possible, indeed, to reach this conclusion by starting from the conception of the universe as both absolute and mental. For a universe conceived as mental *but impersonal* would consist in an aggregate of mental phenomena instead of constituting an individual whole. A consistent idealistic absolutist must accordingly conceive the Absolute as person.

Hegel and Bradley and my great teacher, Josiah Royce, are the personal absolutists who have influenced me most. Bradley denies to the Absolute the name 'self,' but none the less means by 'Absolute Experience' precisely what the personal absolutist means by 'experiencer,' or 'self.' The reasons for counting Hegel a personal absolutist are set forth in Chapter X of my *Persistent Problems of Philosophy*.

[3] Cf. *Persistent Problems of Philosophy*, fifth edition, p. 440[2].

its sectors and is not made up or put together of them, so the Absolute determines the nature of the many included within it.

(*b*) The Absolute Person *as self* I describe as a conscious being; and by 'conscious' I must mean essentially what I mean when I describe myself as conscious. In other words I must hold that the Absolute Self genuinely perceives, thinks, feels, and wills.

Tumultuous objections to this doctrine, so baldly stated, press upon each other. They fall into two groups: difficulties involved in conceiving the universe as Absolute and difficulties inherent in regarding the universe as Self which includes selves. (1) The fundamental difficulty of the first type is stated as follows: Personality involves limitation and accordingly the Absolute, which means the Unlimited, cannot be conceived as self. This objection, in this general statement of it, I very briefly dismiss. For, like Hegel and Royce and many besides, I mean by 'absolute' not 'unlimited' but 'self-limited,' that is, limited-by-nothing-external-to-oneself. But my critic urges more specific objections. It is impossible, he insists, to conceive of Absolute Self—that is, of changeless, all-including self, unhampered and unthwarted from without—as sharing in certain of our human experiences, sensational and emotional—in our hearing and our smelling, for example, and in our grieving and our yearning. Yet, as the critic rightly insists, the very core of personal absolutism is the doctrine that every human experience is identically a part of, constituted by, the absolute experience. The Absolute must indeed have sense experience, must feel regret and longing else, in Royce's unforgettable phrase, he will be "less and not more than we are."[1] Two difficulties seem to me to be here involved: in the case of the sense experiences, that of attributing to Absolute Self that functioning of bodily organs which accompanies our sense perception; in the case of both the sensational and the emotional consciousness, the apparent necessity of conceiving Absolute Self as either passive or as thwarted. The first of these objections I may at once dismiss as implying the essentially

[1] *World and Individual*, ii, p. 364.

dualistic position already rejected.[1] The second of them, as it applies to sensation, is also readily met. For I can attribute to Absolute Self the qualitatively various sense experience—the seeing, hearing, and the like—and yet regard Him as creating, not passively receiving, these experiences. I cannot, however, so easily dispose of the difficulties centring in what may be called the baffled emotions. It does indeed seem on the face of it impossible to attribute sorrow or disappointment, yearning or doubt, to Absolute Self, that is, to the literally All-knowing Person whose will is expressed in the existent universe.

This crucial difficulty I do not mean to evade. But I believe that it is met, and can only be met, by the Hegelian conception, stressed and illuminated by Professor Royce, of the Absolute Person's sharing yet transcending the experience of the included, partial selves. I find no lack of human analogies. The sympathetic parent or older friend may genuinely feel a child's grief, affective quality, organic sensations and all, and yet transcend it by the confident realization, impossible to the child in its inexperience, of the grievous happening as itself a factor in a genuinely satisfying situation. And the good teacher will realize the precise questionings of his puzzled pupil; but will experience not only the questioning but the answer—will, in other words, share yet transcend his pupil's experience.[2]

This Roycian conception of sharing and also transcending experiences offers a clue to the solution of still other problems which I shall barely suggest. It may serve in the first place to reconcile the conception of Absolute Self as changeless with the equally essential doctrine that Absolute Self, as all-knower, experiences change. The critic urges that personal absolutism (and indeed absolutism of any sort) is incompatible with the admission of the experienced reality of change: what I directly

[1] I have briefly treated, in *Persistent Problems of Philosophy*, fifth edition, pp. 456 f, the specific question: Can Absolute Self be conceived to have sense-perceptions without a body? Or, on the other hand, can a body be attributed to Absolute Self?

[2] The Freudian conception of sublimation may perhaps be affiliated with this doctrine of transcendence.

know, the critic insists, of change, of progress, of dissolution, gives the lie to the assertion of a changeless Absolute. In reply, I admit that the Absolute Self shares this finite consciousness of pastness and futurity, but I add that He also transcends this awareness of change by knowing past and future alike as parts of a more-than-temporal whole.[1]

When I face the even more difficult problem concerning the goodness of Absolute Self, this conception of sharing-yet-transcending offers me at least a formula, indicates how, conceivably, the problem may be solved: On the one hand, I must regard the Absolute Person, just because He wills the all-of-reality, as willing the good, in the sense of the self-sufficient, object of will. And, on the other hand I cannot, if I would, deny the stark reality of ugliness, of stupidity, of anguish, and of sin. I must then, it appears, conceive of Absolute Self as genuinely experiencing, and indeed willing, ugliness, stupidity, anguish, and sin as real though subordinated parts of a whole, which, in its totality, is good. To the question: how can these horrors and brutalities constitute parts of a good I have indeed no specific answer. But the truth that Absolute, and thus all-powerful, Self wills them not for finite selves existing apart from Him but for Himself, the sharer of all experience, gives me metaphysical assurance that the question has its answer.[2]

(2) I turn to the criticisms of the second type, those which stress the incompatibility of this doctrine of the all-including absolute self with the experience which every man has of his own individuality. A man is no longer himself, my critic urges, if he is simply one part, one bit, one ingredient of a Great, all-devouring Self; and, conversely no real, individual self, infinite or finite, can be supposed in a literal sense to contain real persons, genuine individuals, as parts of itself. In the face of these objections I appeal, as my critic appeals, to human experience, but I read it with a difference. The everyday self, I protest, does experience himself as a sort of hierarchy of many partial selves, as includer of a reasoning and an impulsive self, of a conscientious and a

[1] Cf. Royce, *World and Individual*, ii, Lecture III.

[2] Cf. Royce, *The Spirit of Modern Philosophy*, Lecture XIII.

reckless self, of a business-like and a speculative self. In the words of the old rhyme:

> Within my earthly temple there's a crowd,
> There's one of us that's humble, one that's proud;
> There's one in eager search for earthly pelf,
> And one who loves his neighbour as himself.
> There's one who's broken-hearted for his sins,
> And one who, unrepentant, sits and grins.

And the concluding verses express the naïve perplexity:

> From much corroding care I should be free
> If once I could determine which is me.

The personal absolutist holds precisely that no one of these conflicting selves but the articulating whole of which they are parts constitutes the human *me*; and that similarly all the human selves may be and are parts of the One Self.

There remains the question: is not this conception of the included self utterly incompatible with the experience of self as individual? My reply presupposes in the first place the conviction that to be individual is to be unique, to stand in a class by oneself, to be irreplaceable by anything else, however similar; and, in the second place, the belief that the objects of volitional and emotional consciousness are always individuated.[1] By way of these conceptions I achieve the metaphysical assurance that every human self though indeed part of the Absolute Person, is a unique part, individuated by absolute will and inviolably distinct from every other embodiment of absolute purpose.

In brief and arid outline I have indicated the outcome of my metaphysical thinking.[2] I have devoted the greater number of

[1] Cf. Royce, *The Conception of God*, edition of 1897, Appendix, pp. 273 ff, 294, 304.

[2] I have throughout been hampered by the fact that I have recently, in far greater detail and with more explicit reference to other systems, attempted a similar statement. To this fuller discussion, in the last chapter of the last edition (1925) of my *Persistent Problems of Philosophy*, I venture to refer any reader of this paper who may find in it too summary a statement of personal absolutism.

my pages to the development, first, of the idealism and, next, of the absolutistic personalism which distinguish my conclusions from many systems of contemporary metaphysical doctrine. But I am eager at the end to stress once more the point to which at the start I called attention: the wide acceptance by modern philosophers of the first article of my philosophic creed: the doctrine that mental realities exist. In my opinion, philosophers nowadays greatly underestimate the significance alike of this doctrine and of the relative unanimity with which it is held. I urgently invite all such realists as assert the existence of mental beings to make common cause with idealists of every type against the materialism which, under different names, presumes to deny the experienced reality of the mental life.

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THE FAITH OF A LOGICIAN

By MORRIS R. COHEN

Born 1880; Professor of Philosophy, College of the City of New York.

THE FAITH OF A LOGICIAN

A. S. M. Amico delectissimo.

ALL autobiography, as Goethe realized, must inevitably contain a mixture of fiction with its truth. Our views as to our past development cannot but be moulded by our present beliefs. But for that very reason autobiography is one of the ways of exhibiting one's fundamental beliefs. The assigning of motives is always a somewhat arbitrary procedure—many conflicting ones are equally plausible. But when one has little space to develop adequately the logical reasons which seem to support one's main positions, it is convenient to fall back on the form of a personal confession of faith with an indication of the motives which led to that faith.

EDUCATION AND THE SEARCH FOR A FUNDAMENTAL PRINCIPLE

If philosophy is viewed broadly as the love of wisdom or general knowledge, I may say that such a love was awakened in me between my seventh and tenth year by my grandfather, a poor tailor in the Russian town of Nesviesh. Though he never learned to write and had only a moderate reading knowledge of Hebrew, he had become the master of an extraordinary amount of knowledge and wisdom. Walks and talks with him first stimulated my imagination about the world at large and its history. From him, also, I acquired a certain ineradicable admiration for the ascetic virtues and a scorn for the life of wealth, ease, creature comforts, and all that goes under the old name of worldliness.

For the rest I had a rather varied education. I began, like other orthodox Hebrew boys, with the Bible, and then went on to the Talmud. The first non-religious book which I read was a Hebrew copy of Josephus. When, in 1890, I was sent back to live with my mother in the larger city of Minsk, I began to read Yiddish books on Hebrew history and soon drifted into very secular romances. In 1892 I was brought to New York, and in 1895 I entered the scientific course of its City College, where, in addition to mathe-

matics, physics, chemistry, and biology, I learned to appreciate French literature.

Possibly the circumstances of my youth, which prevented me from participating in the usual boyish games, emphasized my inclination to indulge in idle or disinterested speculation. In any case, my own limited experience is in accord with the Aristotelian view that philosophy grows out of our native curiosity or wonder about the world at large. To philosophize has always seemed to me as natural and desirable in itself as to sing, to dance, to paint, or mould, or to commune with those we love.

Nevertheless the specific occasion which led me into technical philosophy was my interest in the Socialist Labour Party. Wishing to prepare ourselves for more active and intelligent propaganda, a small group of us, young college students, read Marx's *Das Kapital* and other socialist classics. The references in Marx and Engels to Hegel's dialectic method gripped me most emphatically. My courses in logic and economics at college had led me to J. S. Mill, and I felt that the fundamental issue between individualism and socialism was inextricably bound up with the difference between the psychologic and inductive method represented by Mill and the dialectic and historical method of Marx and Engels. Not having any competent guide to philosophy, I naïvely turned to Hegel himself and tried to get enlightenment from an English translation of the third part of the *Logic*. This, of course, was too tough a diet for a philosophic babe. Yet I could not abandon the quest. I had a vague conviction that there was something radically wrong with Mill's doctrine of induction and his attempt to build up a world out of independent things, facts, or "states of mind." After all, somehow or other, things *are* intimately connected in the same universe, and, indeed, they often fuse their very being. Though I could not grasp the exact force of Hegel's argument, it became associated in my mind with Shelley's lines:

> Nothing in this world is single,
> All things by a law divine
> In each other's being mingle . . .

My search for more definite enlightenment along this line led me

to the neo-Hegelian school; and the books which afforded me most food for reflection were Watson's *Comte, Mill and Spencer*, and Dewey's *Psychology*. They confirmed my aversion for the positivists and for their superficial efforts to dispose of the problems of reality. Yet I could not accept the constructive claims of the neo-Hegelian philosophy. I had a strong repugnance to a certain vague, supernatural element in it that is incompatible with the spirit of the natural sciences, which have always seemed to me man's supreme achievement in the way of solid knowledge. The intellectual world was thus divided for me into two camps, and I could not be at peace in either. I therefore fell into a slough of philosophic despond from which desultory reading and agonized efforts at original thought could not extricate me.

In the spring of 1899 I gained the friendship of Thomas Davidson. His personal affection and his touchingly unrestrained faith in my abilities increased my zest in life and in philosophic study. He aroused in me the great dream of a group of congenial spirits co-operating to create a philosophic encyclopedia that should do for the culture of the twentieth century what the Brothers of Sincerity did for the Saracen culture of the 10th or what Bayle, D'Alembert, and Diderot did for the culture of the eighteenth century. My heart was thus set on the systematic and comprehensive aspect of philosophy and I was led to read generally along diverse lines. With the poverty of time and energy at my disposal then, and for many years after, the distension of my interests filled my intellectual life with many enterprises that just fell short of completion. Davidson himself, at that time, held to an extreme subjectivism and individualism which neither gratitude nor personal admiration could induce me to accept. At his suggestion I turned from the problems of socialism and metaphysics to the problem of knowledge as dealt with by Hume and Kant. The reading of Hume left me with a profound admiration for the clarity and honesty of his scepticism as to various metaphysical and religious dogmas; but in addition to being a little irritated by that genial Tory's attitude to the rational principles of moral and political reform, his fundamental position seemed to me to involve flat contradictions. If the mind is assumed to know its

own impressions only, it cannot logically know that there is an external world that produces or causes these impressions. The relation between such an external world and the impressions of the mind certainly does not conform to Hume's own description of causality as the habitual succession of impressions *in* our mind. The contradiction between the practical certainty and the theoretic scepticism as to the existence of the external world (expressed at the end of the first book of Hume's Treatise) seemed to me to arise only because he had assumed both that the mind knows nothing but its own impressions and that we also know that our individual mind is only one among other objects in the universe. Obviously, if the second assumption is true, the first is false; and as the assumption of the existence of the larger world is involved in our very discussion, the mind cannot be limited to a knowledge of its own impressions only. That which is known is always more than the mere (subjective) knowing activity itself, else there could be no present recognition of past thoughts.

The effort to understand Kant's solution to Hume's problem was interrupted at that time by the necessity of helping to organize and, after Davidson's death in 1900, to continue the practical educational work which he hoped to develop into a Breadwinners' College. For a number of years I thus conducted classes in cultural history, in which I tried to apply the evolutionary philosophy to the history of industry, of the family, of religion, and of Greek and Hebrew literature. The reading of some of Professor Boas's anthropologic writings, however, soon raised doubts as to the adequacy of any formula of universal evolution, whether Hegelian or Spencerian. The discovery that our histories always depend upon our assumption as to the nature of the things studied, led me to reject the prevalent illusion that the history or temporal genesis of anything can enable us to dispense with the direct study or analysis of its present nature. The history of labour, marriage, and religion, while extending my vista, offered me no solution of their contemporary problems. Historicism, as well as psychologism, were thus ruled out for me as all-sufficient philosophic methods or as substitutes for direct rational and metaphysical analysis. In this I was

strengthened by the study of Aristotle, begun in the Davidson Society and continued for two years under Professor Woodbridge. Studies in ethics under Professor Felix Adler also brought me back to my original conviction—to wit, that the problems of individual and social ethics were honeycombed with metaphysical assumptions.

It was the study of Russell's *Principles of Mathematics*, some months after I was appointed to teach mathematics at the City College, that finally liberated me from the feeling of helpless philosophic bewilderment and enabled me to undertake an independent journey. The demonstration that pure mathematics asserts only logical implications and that such logical implications or relations cannot be identified with either psychologic or physical events, but are involved as determinants of both, seemed to me to offer a well-grounded and fruitful starting-point for philosophy. For whatever the opinions of philosophers, they must rely on the validity of logical reasoning to establish their position; and at no time could I take seriously any attempt to question the fruitfulness of mathematical method in building up scientific knowledge. This renewed faith in logic and mathematics showed me how to avoid both the Scylla of Mill's inductive empiricism and the Charybdis of Hegelian absolutism. An inadequate view of the reality of relations or abstract universals still seems to me the common vice of both these influential philosophies. (1) Empiricism (the modern name for nominalism) never seemed to me to account for the real connections in the world. How can relations, if they exist in the mind only, connect things external to it? Moreover what can we say about any fact or thing that does not involve abstractions as determinations? (2) Similarly does the Hegelian denial of the reality of abstractions lead to the location of connections not in an objective nature but in an absolute totality that is beyond understanding. While such an absolute totality may be an ideal demand of thought, its content is always something of which we are most ignorant. Nothing is therefore really explained by it.

The doctrine that abstract logical or mathematical relations are real justified for me the hypothetico-deductive procedure of

science in which we follow the implications or effects of one single aspect or factor of a situation. For not all things that occur together are relevant to each other. Scientific search is difficult just because of the exuberant multiplicity of existential coincidences, which are irrelevant to our inquiry as to the order of meaning. But if scientific inquiry is successful it discovers abstract relations which do characterize the world of phenomena. Thus instead of the alternative of either swallowing the whole universe or starving intellectually, the method of logical realism showed me how to bite into it.

In subsequent reflection this metaphor of "biting into the world" proved itself peculiarly apt in suggesting that opposing considerations must be taken into account in explaining anything, and indeed that nothing is definite apart from both of every pair of polar categories such as form and matter, identity and difference, mediacy and immediacy, etc. The reality of mathematical relations, and the principle of polarity, opened for me the path to systematic philosophy.

Logical Realism

The discovery of the logical or hypothetical character of pure mathematics showed me in a new and clear light the relation of scientific method to induction, to scepticism, and to a priori rationalism. This led me to a better understanding of the old and fundamental issue of conceptualism (or subjectivism) versus realism.

Mill's contention that the truths of mathematics were approximations or inductions from experience became impossible after the distinction had been drawn between physics as a science of existence and pure mathematics as the development of the logical implications of *all* kinds of assumptions. That there are no two rational numbers whose ratio is $\sqrt{2}$ or π, is not and cannot be an induction from experience. Experience alone cannot prove the absolute impossibility of things that have not as yet occurred.

This disposed of the absolutistic nihilism (which may call itself empiricism, relativism, or scepticism) that denies the

existence of all necessary truths and tries to maintain that even propositions like "2 plus 2 equals 4" are contingent so that on some other planet the result might be different. One does not have to go to another planet to see that two pints of water and two pints of alcohol will not necessarily make four pints of the mixture. But the hypothetical truths of pure mathematics are not affected by empirical physical facts that do not conform to its postulated conditions. The truth of the proposition that "two and two equals four" (assuming the usual definition and postulates of arithmetic) is not a question of physical observation, nor of psychologic habit, but of logical proof. It can be demonstrated that its denial involves self-contradiction, and thus cannot maintain itself. It cannot, therefore, be true that all assertions are merely personal opinions; or if you call them opinions, it is certainly true that the opinion "2 plus 2 equals 5" is not as true as "2 plus 2 equals 4."

However, the same realization of the logical and hypothetical nature of pure mathematics also destroyed classical a priori rationalism. It destroyed the ground of any assertion that we know a priori and with apodeictic certainty that physical space must be Euclidean, just as the development of modern physics has rendered vain Kant's further argument that we know a priori that physical nature must follow Newtonian laws of mechananics. Indeed, renewed faith in formal logic showed me that since all proof rests on assumption, it is vain for any philosophy to pretend to prove all of its material propositions. It must make indemonstrable assumptions in regard to existence, value, or duty. This is particularly cogent against Kant's transcendental method, i.e. the attempt to prove certain propositions true because they explain how experience is possible. We cannot explain experience or anything else without assuming something; and it is a downright logical fallacy to assert that because our assumptions explain something they are therefore demonstrably true. Obviously Kant does not and cannot offer any cogent proof that there may not be some other set of assumptions which will also explain the facts of experience.

That an assumption is not proved is, of course, not an argument

against its truth. So long, also, as assumptions differ there will be ground for preferring the one that best explains the assumed facts. But the recognition of possible alternative assumptions bankrupts the pretension that philosophic assertions are all necessary and not merely probable truths. Doctrines as to the material nature of the world or of our duties in it can thus never be more than merely probable.

The principles or laws of every science are the rules or constant relations which hold amidst all the changes in its field; and so the fundamental laws or postulates of pure mathematics or logic are the invariant forms or relations which hold of all possible objects.[1] Logical laws are thus neither physical nor mental, but the laws of all possible significant being. No material fact can be deduced from purely formal considerations, but formal relations are assumed in inferring any fact from any others, and indeed no fact can be formulated except in terms of the forms or universal relations embodied in it. The world which is the object of science (since all science involves logic) is thus a union of form and matter. It is rational in the sense that its phenomena do conform to the laws of possibility that are the objects of logic; but the element of chance or contingency can never be eliminated from it, since all proof must rest on unproved assumptions. The world may also be said to contain an irrational element in the sense that all form is the form of something which cannot be reduced to form alone. The duality or polarity of terms and relations cannot be eliminated by reducing everything to terms alone, or to relations alone. We may say that everything which is intelligible can be expressed in logical form; but that which is expressible has no valid claim to absolute totality. Nor is there any contradiction in speaking of the inexpressible, since it is of the essence of all expression to point to something beyond itself.

The Principle of Polarity

The principle of polarity is suggested by the phenomena of magnetism where north and south pole are always distinct,

[1] I have tried to show this in greater detail in the *Journal of Philosophy*, vol. 8 (1911), pp. 533 ff., and vol. 15 (1918).

opposed, yet inseparable. We can see it in general physics where there is no action without reaction, no force or cause of change without inertia or resistance. In biology the life of every organism involves action and reaction with an environment. There is no growth without decay, or as Huxley puts it, protoplasm manages to live only by continually dying. This suggests a supplement to the principle of causality. Not only must every natural event have a cause which determines that it should happen, but the cause must be opposed by some factor which prevents it from producing any greater effect than it actually does. A physical or chemical system has the precise rate of change that it has, an organism attains its specific form at any moment, a social movement has just the effect or influence which it in fact has, because of the presence of certain opposing or balancing factors necessary to produce the definite result.

From this point of view not only every static, but also every kinetic system, involves a balance or equilibrium which makes description in the form of equations applicable. Of course it is only when the elements are measurable and thus numerically formulated that equations can generally be employed in a fruitful way. But it should be noted (1) that exact or mathematical reasoning is not restricted to quantity, but is applicable in non-quantitative realms like group theory or analysis situs, and (2) that quantitative determination is but one way of eliminating the indetermination of such descriptions as A is hot, A is cold, A is large, A is small, etc. Statements such as A is 60° F. or 5 yds. include the truth of opposite partial statements and assert something definite and determinate in relation to all comparable objects.

The principle of polarity, of necessary opposition in all determinate effects, thus becomes a heuristic principle directing our inquiry in the search for adequate explanations. Hence, if we pass from the realm of natural events, where reigns the principle of causality, to the wider realm of all possible objects of consideration governed by the principle of sufficient reason, our principle of polarity becomes a supplement to the latter. It then asserts that in all determination there are opposing elements or categories,

such as unity and plurality, identity and difference, activity and passivity.

The obvious value of the principle of polarity is in enabling us to avoid one-sided and interminable (because indeterminate) issues, and in making us more hospitable to the complexity of seemingly paradoxical facts, such as that we rest alternately on our feet while walking or that we remain the same while growing or changing. All this is of the utmost importance in metaphysics or general philosophy where we are subject to two great temptations: (1) to hasty generalization about objects like the universe, which are not as determinate as is commonly supposed; and (2) to deny the vision of others who see things from a different point of view.

(1) The question of the indeterminateness of the absolute or total universe will occupy us later. At present it is well to note that while reality has many elements and everything is held in place by opposite forces working at the same time, our thought and expression is linear, i.e. we think and write along one line at a time. (2) That the great philosophers are generally right in what they assert (of their own vision) and wrong in what they deny (of the vision of others) was recognized by Leibniz. In any case we must be both critical and sympathetic toward the philosophy of others, and avoid both the blindness of excessive partisanship and the mushiness of eclecticism typified by those soapy minds that, when confronted by the choice between heaven and hell, hope to combine the good points of each.

The effort to eliminate false alternatives or one-sided views is characteristic of the Hegelian philosophy. Yet the principle of polarity is not the same as that of the Hegelian dialectic. In the first place the distinction between the formal and the material, between logical categories and historical existences, removes the Hegelian confusion in which concrete things seem to be generated in time either by ghostly conflicts or by sublimated matings of abstract categories. Novelty in concrete being cannot be generated by the combination of pure abstract forms. This objection may be taking Hegel's metaphors too literally; but the confusion needs to be eliminated in any case. In the second place the principle of polarity leads to a more emphatic denial of identity between

opposite categories like being and non-being. The opposition between contrary categories is neither absorbed nor in any way transcended by their unity, any more than abstract unity can be generated by abstract difference. The opposing considerations involved in all existences (like the north and south pole of a magnet) are different aspects which never become identical though they necessarily coexist. Nor does the fact that they are only phases of concrete existences make them in any significant sense unreal. (We can, of course, define the real as that which exists only as concrete; but then the proposition that the abstract is not in this sense real becomes a mere tautology.)

So long as significant wholes involve diverse parts, the latter are to the scientific vision just as real or valid as the former. On the other hand, since absolute totality is an ideal limit in some respects never actually attained, the parts are psychologically more real or vivid than the whole. If abstractions are parts of any possibly existing world, statements about these parts need not be false. Partial truths are not simply false; for in the effort to attain truth, false statements must be eliminated, but partial truths need only to be supplemented.

The principle of sufficient reason on which we rely doubtless postulates a world in which different things are more or less connected. But the ideal totality does not exist in nature at any one time nor even as any actuality of knowledge. It is a necessary ideal to indicate the direction of our scientific effort, but it cannot serve as an explanation of any particular thing in it.

Under the head of polarities we may distinguish between contradictions, antinomies, and aporias or difficulties. Strictly speaking, contradictions are always dialectical, i.e. they hold only in a logical universe. Thus if I say a house is thirty years old, and someone else says it is thirty-one years old, the two statements are contradictory in the sense that both cannot possibly be true at the same time and in the same respect. Both statements, however, can certainly be true if we draw a distinction, e.g. thirty-one years since the beginning and thirty years since the completion of its building.

Thus two statements which, taken abstractly, are contradictory

may both be true of concrete existence provided they can be assigned to separate domains or aspects. A plurality of aspects is an essential trait of things in existence. Determinate existence thus continues free from self-contradiction because there is a distinction between the domains in which these opposing statements are each separately true. When opposing statements are completed by reference to the domains wherein they are true, there is no logical difficulty in combining them. In the purely logical or mathematical field, however, we deal not with complexes of existence, but with abstract determinations as such. Here two contradictory assertions always produce a resultant which is zero, i.e. the entity of which they are asserted is absolutely impossible.

Of incompletely determined existence—as in the case of the total universe—contradictory propositions do not annihilate each other (since they refer to a complex of existences); and yet they cannot always (because of the indefiniteness of the subject) be reconciled with each other. This gives rise to the antinomies of metaphysics.

In general, the opposite statements that are true in regard to existing things give rise to difficulties when we cannot see how to draw the proper distinction which will enable us to reconcile and combine these seeming contradictions. Thus we frequently find certain facts in a scientific realm calling for one theory, e.g. the corpuscular theory of light, and other facts calling for a diametrically opposite one, viz. the wave theory. Such difficulties are solved either by discovering new facts, which give one of these theories a preponderance, or else by discovering a way of combining the two theories. Sometimes an intellectual dilemma is avoided by rejecting both alternatives. This is illustrated by the old difficulty as to whether language was a human invention or a special revelation. The difficulty was avoided by introducing the concept of natural growth.

Nature also presents us with seeming impossibilities in the form of practical difficulties, e.g. how to live long without getting old, how to eat our cake and yet have it too, etc. Such contingent or physical impossibilities may baffle us for ever. Yet some of

them may be solved by finding the proper distinction. Thus the invention of boats enabled us to eliminate a former impossibility —namely, how to cross a river without getting wet.

This analysis puts us on guard against two opposite evil intellectual habits: on the one hand to regard real difficulties as absolute impossibilities, and on the other to belittle such difficulties by calling them false alternatives. Thus it is not sufficient to say that the old controversy between the claims of the active and those of the contemplative life represents a false alternative and that we need both. It is, in fact, most frequently impossible to follow both, and the actual problem of how much of one we need to sacrifice to the other often requires more knowledge than is at our disposal.

The Universe as an Absolute Totality

The fact that we can speak of the Universe and can refer to *it* naturally inclines us to emphasize its unity. It is, however, possible to speak of a heap of things that have no bond except that of being together in a given space. Whether the universe, as the totality of all things actual and possible, has a greater unity than a merely spatial one, we are, in view of the fragmentary character of our knowledge, in no position to answer. We do not even know with certainty whether the universe includes a finite or an infinite number of material particles. Because of its essential incompleteness we can form no definite image of it.

The universe cannot be made definite by distinguishing it from something outside of it. Nor can it be made complete and definite by showing the order or pattern which prevails through it, since all sorts of incompatible patterns and lack of order are also found in it. The universe is obviously not completely or actually in existence at any one time. It contains many abstract possibilities which are not physically compossible, so that when some of them are realized, others become impossible. If the chaos of illusions and contradictory possibilities are said to exist in the mind only, they are not thereby banished from the universe, since the mind exists in it; and if we define existence in such a way that illusions

are said not to exist, all illusions will not be thereby eliminated. The realm of existence may by definition be restricted to some orderly cosmos, but the universe will continue to include many other things besides.

This indefiniteness in what is denoted by the term universe, as an absolute totality without qualification, makes all sorts of contrary propositions true of it.

The universe is neither given in experience nor is it a mental construction; yet it is certainly in some sense given.

The totality of all things is obviously not given in sense perception. What is so given is always something occupying some part of time and space. Obviously the total universe includes more than we can ever perceive or form into an image. Our experiences taper off into the indefinite, but in any case no finite number of them can give us an absolute totality. Neither can the universe be a mental construction. The extent and complexity of the world is beyond our power of synthesis. We cannot think of all the possible relations of even a finite number of entities, and the number of possible qualifications of our world is endless.

Yet it is impossible to maintain that nothing at all exists, or to deny that there is a world in some some sense or other.

Out of this and similar dilemmas we can extricate ourselves only by recognizing that "the world" is a symbol for something not completely determinate. It is partly known, but also always involves the unknown. Any part of the latter may become known, but never the whole of it. Part of the universe exists, but many more parts do not. Many parts of the universe are determined, but so long as plurality, individuality, and novelty are not denied, contingency or indetermination is uneliminable. Part of the universe is material and part is mental. But any assertion that all is matter or that all is mind amounts to a violent resolution to use an old word in a new and confusing way to include its negative. For consider the difference between the house we live in and the house we dream of. Whether you say both are material or both are mental, the factual difference remains and is accounted for by neither of the monistic assertions about the universe.

Similar antinomies hold with regard to the assertion that the

universe is changing and that it remains identical. Stated positively the universe is an ideal, in the sense that it indicates the direction in which the full nature of things is to be found. It is present formally not actually. As present it includes all unreality, illusion, etc., which in a certain sense do form the content of the world, even if we define existence to exclude them as unreal.

Philosophy of Nature

The two poles of philosophic interests are the macroscopic and the microscopic, the infinite totality of everything (*the* universe), and the ultimate elements which enter into anything. Logicians may be most passionately interested in the larger vistas, but a faith in truth similar to that of Browning's Grammarian makes them devote themselves to the minuter problems.

Is the world one or many? Both the continuity and discreteness of things stare us in the face; and monists and pluralists differ because they fail to do justice to both of these aspects of nature. Since every proposition (A is B) involves elements that are different and yet in some way identical, there is no hope for philosophy unless it recognizes that identity and difference while logically different are existentially inseparable in the nature of anything. The classical philosophers, impressed by the logic of identity, naturally belittled the importance of change which introduces diversity into the nature of the things that change. Modernistic philosophers stress the fact of change so as to ignore those elements of unity or identity without which things cannot be said to change. Common sense is shocked by the idea of change without anything that changes; and logic reconciles change and constancy by saying that the nature of anything is the group of invariant relations which remain the same through the change.

As a result of the progress of modern physics and biology many of the formerly assumed constancies of nature, like the eternity of the hills or the fixity of species, have disappeared. But science has also discovered invariable order in changes which formerly seemed chaotic and arbitrary.

If change is essential to the constitution of natural or temporal

objects it follows that they cannot be adequately described in terms of what they actually or sensibly are at any moment. The actual dominates us sensibly and vitally, but it is only an infinitesimal part of the larger world of possibilities. The nature of anything must include its possibilities. The danger of taking possibilities seriously, however, is that of thinking of them as if they were thin copies or ghosts of actual things floating in space.

The fact that things change according to some order gives rise to the idea of determinism and causality. But if anything is to be affected by something else, it must be distinct from that other. It must, then, have a realm which is not due to, or affected by, that other. A genuinely pluralistic world cannot be completely determined in all respects. The general impression that the discovery of laws by the natural sciences rules out the element of chance or contingency from our world is shown to be erroneous by the following considerations:

(1) The most thoroughgoing mechanism necessarily involves contingent data. If you derive the present arrangement of particles in the universe from a previous one by assuming some law, you push back the contingency to the past arrangement. Mechanical forces cannot be supposed to operate except on a given distribution of material particles. The contingency of such distribution cannot be eliminated by an infinite regress.

(2) Every physical law asserts that a certain phenomenon or characteristic of it depends on a limited number of factors and on nothing else. There is no use in saying that temperature and pressure determine the freezing-point, if the latter depends upon everything else. Every law of dependence thus implies independence of all other things, which are thus irrelevant to the given effect.

(3) The ultimate laws of nature are themselves contingent. They just happen to be. Any one law or reason from which they might all be derived (which is logically impossible) would itself be contingent, without any proof that it might not have been different. The derivation of most of our laws cannot eliminate all contingency, and the existence of a different world is always a theoretically significant alternative.

The insistence that the search for scientific law presupposes elements of independence as well as dependence in nature, aids us against vicious forms of atomism, organicism, and mysticism. Atomism is vicious if it makes every entity a complete and independent universe, in disregard of its relations to other entities. We see much vicious atomism in individualistic anarchism and in pleas for irresponsible self-expression. Vicious organicism is the refusal to note any relative independence or externality of relations between things which happen to be juxtaposed in our universe. It shows itself in the persistent tendency to confuse every line of clear thought by appeal to a vague totality which is irrelevant to the point at issue. Mysticism is vicious or obscurantist if it denies the definite or determinate character of things in the interest of beliefs that cannot stand the light of reason.

Teleology and *Vitalism.* The belief that independence, contingency, and spontaneity in nature are not inconsistent with genuine laws or invariant relations (strengthened in me by the writings of C. S. Peirce) does not justify the use of final causes by vitalists to deny the scientific fruitfulness of physico-chemical explanations in biology. It is perfectly legitimate to describe organic and even inorganic phenomena from the point of view of the consequent so that the antecedent seems a means. But we must be on guard against attributing conscious effort and intention to nature when there is no adequate evidence for their actual existence. It is tempting to describe the behaviour of organisms in terms of self-preservation; but it is equally legitimate to describe the life of every individual as a successful effort to attain death. The circulation of the blood in the human body is one of the necessary conditions of its consciousness, but consciousness is not a necessary condition for the circulation of the blood. Most of the arguments used by Driesch, Bergson, and other vitalists against possible progress in the physical explanation of biologic facts seem to me demonstrably erroneous. But at best they would only prove that in regard to certain phases of life we must remain in ignorance. Bergson's attempts to explain specific biologic phenomenon (such as the supposed similarity of structure between the eye of the scallop and the vertebrate eye) by means of "life as a whole,"

conflicts with the rule of scientific method that specific effects must be explained by specific causes. Nor will the hypothetical "psychoids" and similar entities of Driesch and others stand the test of scientific verification. The phenomena of life are assuredly different from those of non-living nature; but there is no proof that life did not arise (or may not now be arising) out of non-living material. And there is no good reason why the scientific methods which have proved fruitful in the inorganic sciences should not be tried in the field of biology. Popular teleologic evolutionism, in which man appears at the top of a biologic ladder that all other organisms are trying to mount, seems to me romantic vanity. That many species—indeed all vertebrates—have originated in simpler forms seems historically clear. But there is no law of evolution that all organisms must change in a given direction. Protozoa and vast numbers of other "lower" forms do not seem to have changed since the beginning of geologic time. Indeed, experimental biology does not need the concept of evolution at all. When it clings to it, it is only out of verbal piety.

The study of biology should also impress us with the discontinuity of nature. For without such discontinuity we could not recognize different species.

Mind and Body

The rejèction, in my youth, of the whole supernatural world-view left no room for the mind or soul as an entity existing apart from the body. I have never been able to imagine what mental life apart from any body can possibly be. All sensations, feelings, emotions, etc., seem to me to be events in a body, and to involve consciousness of that body. If, then, the rejection of the belief in ghosts or disembodied spirits be materialism, I should call myself a materialist like Democritus, Hobbes, and Spinoza. Such materialism makes me reject the fundamental assumption of Freud and others who talk of purely mental determinism. Mental life is spasmodic and interrupted so that it lacks the continuity for the direct application of the causal relation. It is doubtless true that worry and other emotions will have serious bodily effects. But the cause of these bodily effects can be found in the bodily accompaniments of the emotions. It is therefore only in a popular and practical, but not in a scientifically accurate, sense that we can speak of the mind as exerting efficient causality. The sense of mental efficiency is an indication of vitality. But the laws of causality operate just as truly when we are not mentally very efficient.

I must reject with some vehemence the view of those materialists or behaviourists who think that the existence of conscious phenomena can be denied or adequately described in purely physical terms. Consciousness, when it happens, is a real addition to the phenomena of nature. It is unlike anything else. How it originates and what sustains it seem to me to be empirical and not metaphysical questions.

The popular notion that materialism has been refuted by the theory that atoms are composed of electrons seems to me rather fatuous. Natural science must remain materialistic in the sense that it must always reject explanations of material phenomena in terms of disembodied spirits or other unverifiable entities.

The form of materialism that is objectionable to science and which has been refuted by philosophers since Plato is that of nominalism, which denies the reality of relations or logical connection between things. For purposes of certain analyses it is convenient to regard matter as entirely inert; but reflection shows that a material world must necessarily involve some spontaneity; and there is no a priori reason why life and mind may not develop in it. All we need to remember is that our conception of the material world must include the possibility of such development.

Mind is often considered, not as a natural existence or function of an individual organism, but abstractly as when we speak of the mind of an age or nation. We thus speak of science as a spiritual body to which different individuals contribute. As a natural existence, however, science appears as a complex of books, apparatus, the memories of individual organisms, etc.

Ethics

From a naturalistic point of view the whole life of the human species is a minor episode in the history of a tiny speck of cosmic

dust; and man's natural fate is determined by forces which visit death and destruction upon the just and the unjust. Yet logically the problem of ethics is just as legitimate as the problem of physics. In both cases we may be said to begin with a set of primitive judgments—in the first case that certain things exist and in the second case that they are good or ought to be. We deal with these judgments scientifically if we examine them critically and elaborate them in the form of a rational system determined by principles. The greater difficulties of a theory of ethics are due to the greater variability of man's moral judgments and their dependence on all sorts of conventions which differ according to time and place. Diverse peoples who agree in condemning murder, incest, theft, etc., as immoral do not necessarily mean the same thing by these terms. Christians who accept the command "thou shalt not kill," do not think it wrong to do it at the command of a military officer. Few see anything wrong in long-distance killing, e.g. in our starving other peoples like the Chinese by monopolizing the fertile lands that keep us in luxury. The Old Testament horror of incest does not touch Abraham's marrying his half-sister.

Moral feelings are very strong, but this does not prevent them from appearing as irrational taboos to those who do not share our conventions. This should warn us against the tendency to make ethical philosophy an apology or justification of the conventional customs that happen to be established. Suppose that someone were to offer our country a wonderfully convenient mechanism, but demand in return the privilege of killing thousands of our people every year. How many of those who would indignantly refuse such a request will condemn the use of the automobile now that it is already with us?

On the other hand, there can be no moral appeal except to some desire that persists. The most rabid amoralist like Nietzsche must appeal to his reader's sense as to what is desirable; and the followers of Karl Marx, who boasted that he never spoke of justice, would be dumb and ineffective if they could not appeal to a hatred for the injustice of our present economic order.

These reflections lead me to the rejection, not only of the

Hebrew idea of moral laws as commands of Yahveh, but also the Kantian view of specific moral rules (such as that against lying) as absolute or categorical imperatives. It leads me to the Aristotelian conception of ethical judgments as matters of wisdom in the conduct of life. Specific ethical rules are lessons as to what is good, illumined by past experience and therefore subject to correction and revision. This saves us from fanaticism and such hideous insensibility as is involved in Kant's condemnation of a lie told to save an innocent life from a foul murder. The naturalistic view of morals also carries with it a greater regard for natural desires. The moral life must, to be sure, be one of discipline and self-restraint, if like any other art it is to achieve anything. Restraints on natural impulses are, however, good only if, like the restraints on public traffic, they make possible a greater freedom and a maximum of natural satisfaction of our heart's desire. At the same time I cannot completely accept hedonism. The virtues of the hero and the martyr point to the incommensurability of certain moral values, and this offers insuperable difficulties to any calculus of pleasures. Nor can I accept indiscriminate altruism or love of humanity as an adequate principle of all moral life. It is neither possible to love all mankind—I cannot love my neighbour's wife and children as my own—nor would it be good to do so. We can only love what is lovable; and the philosopher must not forget that everything that is morally vile arises out of human nature. If all our natural impulses were good, all training and education would be needless restraint and evil. But the impulses of men and women to direct the conduct of their children and to train them in certain ways are themselves natural, and it is vain to try to suppress them in the interests of unrestrained naturalness.

The truth is that our nature is full of deadly tendencies and that the life of culture or civilization is wisdom organized to combat natural evil. Often, indeed, such organization misses its objective and adds to the burden of life so that some return to simplicity is necessary. But the life of reason is developed by civilization and is not compatible with a return to a purely animal status.

Philosophy of Law

Human beings cannot live together without restraints on their anarchic impulses. Yet, if laws are to be effective, these restraints must appeal to the community. This difficulty is solved by general obedience to a ruler or rule. In modern societies the rule of law is relied on more and more to eliminate the arbitrary personal bias of rulers and to make men more certain as to what are their rights and what they may safely undertake. But philosophic pluralism makes us distrust rules; for the latter are based on generalizations as to what takes place in a dominant number, but not in all cases, so that rules always work hardships in individual cases whose peculiarities are not anticipated by the rule. Many things must therefore be left to the intuition, tact, or good judgment of well-disposed and competent judges or other officials. There can be no government by law apart from men who will administer the law according to their ideas and feelings. How can we guard against the arbitrary and tyrannical abuse of such discretion? Yet, discretion or judgment, if it is sound, embodies some reason or rule which subsequent study may make clear.

My interest in this field was first stimulated by the course of judicial decisions in labour cases. The arbitrary (and often unenlightened) character of these decisions revealed to me the inadequacy of the dogma that judges declare but do not make the law. The rejection of the absoluteness of this distinction between making and finding threw light on the issue between realism and idealism, as to whether the mind makes or discovers the nature of the world.

The unsatisfactory character of American judicial decisions in labour cases led me to question the value and adequacy of the moral principles of the American Bills of Rights which form the justification of these decisions. "Equal protection of law" seems highly desirable in the abstract, but in its application to actual unequal individuals it turns out to be most vague and unsatisfactory. But my aversion to positivism, to the position of those who, like Duguit, claim to reject the strictly ethical or normative point of view, led me to see the truth in the old doctrine

of natural law and natural rights. The moral demand that law should answer to man's interests cannot be ignored in the study or in the making of the law; and the evaluation of these interests is thus an integral part of any philosophy of law.

Law, and even the ethical ideal itself, may certainly be viewed as the historic resultant of various social forces. Yet the old problem of natural law, the problem as to what under given conditions the law ought to be, remains. Realism in the law can be combined with genuine idealism in the doctrine of the inherent limitations of legal idealism due to the conditions of human nature, habits, the legal machinery, and the limitations of man's desire for the moral good.

Philosophy of Art

My general inclination to naturalistic rationalism was fortified by the discovery that it seemed to be the most satisfactory account of a field to which it is seldom applied—to wit, the field of art.

The ascetic and democratic ideas with which I began to philosophize predisposed me to view æstheticism as a form of snobbery. That which has its roots deep in human nature or answers to our fundamental needs cannot depend upon acquaintance with rare paintings or esoteric music. Reflection, however, on the fact that only a few who are highly trained understand the meaning of such scientific laws as that of gravitation, suggested that in the field of art, too, training may make clear what is otherwise vague and indistinct. This led to a distinction between taste which is immediate and vision which involves discrimination in the object seen. If taste denotes mere sensibility there seems little basis for saying that where two tastes differ one is necessarily superior to the other. A pluralistic philosophy finds plenty of anthropologic evidence for the view that talk about superior taste may mean a blindness to its natural diversity. The terms higher and lower have a meaning only in regard to things of the same kind that can be arranged in a linear series. But on what basis can one declare that a taste for Da Vinci's faces is superior to a taste for Turner's landscapes, or either to a taste for Japanese

prints? If anyone is justified in saying that it is poor taste to prefer jazz to Beethoven, it can only be either on the ground that those who prefer the latter are "better" people or else because the objective content or structure of Beethoven's music shows greater art than does jazz. This means a consideration of art rather than mere taste.

If we look on the fine arts as a special group of arts we can see that the problem of creation which they involve is ultimately the rational one of adapting means to ends.[1] To be sure the end is not always clear at the beginning, but becomes clearer as we work towards it. But this is true also in scientific research and other activities. What distinguishes the fine arts from the other arts is the character of the resulting product (I reject the suggestion that what characterized all activity in the fine arts is its pleasantness. Some of it may be painful and not as pleasant as certain activities in the industrial arts or in business.) The artistic product does generally please the observer (with reservations as to the sublime), but not all things which please us are the products of fine art. The latter pleases us by producing things that have a certain structure characterized by rhythm, harmony, or, more generally, beauty.

Beauty is generally viewed as an immediate attribute; but reflection shows that it also elevates us above the actual or material object which embodies it. Aristotle's dictum that poetry is more true than history, means that the artistic representation of the essence of an object has more significance than the mere recital of brute historic facts. Liberation from the actual through a suggestion of possibilities beyond it is as characteristic of art as of theoretic science and religion.

Philosophy of Religion

Having been brought up as an orthodox Hebrew, religion was first associated in my mind with cultus, with prayers and ritual

[1] This means that intelligent art criticism must be based on a knowledge of the problems which face the artist and the technique whereby they are solved. The true critic repeats in part the intellectual work of the artist himself.

observances. The history of Buddhism, Christianity, and Islam confirmed the view that ritual, what men do on certain occasions, is the primary fact, and that the beliefs and emotions associated with ritual are more variable. The same prayer or ritual may have quite different emotional effects. Also many a man like Chief Justice Marshall goes to church without bothering his head about any question of belief. Robertson Smith's observation that ritual is generally older than the myth which explains it, has always impressed me as the beginning of wisdom in a rational study of religion. It is certainly profusely exemplified in the succession of diverse mythical explanations of the Hebrew Sabbath, the Easter ceremony, the worship at Mecca, etc. A Christian saint may replace the local heathen god, but people continue to worship at the same shrine.

From this point of view recent discussions of religion initiated by William James's "Varieties of Religious Experience," seem to me singularly provincial and unilluminating. They throw no light on the main streams of human experience expressed in the great historic religions, such as Brahmanism, Buddhism, Zoroastrianism, Confucianism, etc. James's remark that the religious experience of the great mass of people is secondary, and only that of the founders is important, is certainly superficial. The character of the founder of a religion is largely a product of tradition. Gautama, Moses, and Jesus influence the religion of their followers through the ideal personality that tradition has moulded. Tradition is the most powerful influence in religion. Of the hundreds of millions of people who follow the way of the Buddha, or invoke the name of Mohammed, how many do so because they were born and brought up in their respective communities? How many of those who are convinced that the supreme truth has been revealed to Moses or Jesus have examined the claims of other religions? Clearly the forces of social cohesion determine the main stream of religious phenomena. These considerations have destroyed for me the force of the argument that religion must be true because so many people believe it. As we learn more about diverse religions we find no substantial common core of dogma or belief. Neither the belief in a personal God, nor in personal immortality with

moral retribution after death, is common to Old Testament Judaism, to Buddhism, and to Confucianism.

I confess that I have never been able to understand any theism that was not anthropomorphic; and I have not since my thirteenth year seen any logical force in the theistic argument that the entire universe must have a person (on the human model) as its cause, designer, or director. Any conception of personality which we can form is necessarily based upon such infinitesimal knowledge of the unimaginable whole wherein we move, that it seems to me blind arrogance to be confident of the personalistic explanation. Nor can I see how the author of our whole world can be called good, without blunting the edge of the distinction between good and evil. I do not like to call myself an atheist, because those who apply that term to themselves seem as a rule singularly blind to the limitations of our knowledge and to the infinite possibilities beyond us. As a pluralist I believe that the forces which control all things are ultimately many; and if I could use the term polytheism without implying that these forces are exclusively personal I should call myself a polytheist.

Though I am singularly sensitive to the literary charm of certain types of mysticism, such as that of St. Bernard or Tauler, it seems to me amazing that anyone should argue as James did that the mystic's ecstasy can prove any of the dogmas of religion. I can see no proof that the object of the mystic's experience has any more objective validity than the similar visions of one under the influence of drugs. Nor is the moral elevation of religious conviction beyond question. There is not a revolting feature of human life that has not at one time or another been an intimate part of religion. Sacred prostitution, the sacrifice of children to Moloch, thuggery, assassination, superstitious opposition to science. persecution and wars, the sanctification of slavery and other social abuses—these are but a few phases of religion that it is well not to forget. It may be urged that religion did not originate these practices, but only sanctioned them. But if so, why may not the moral and æsthetic goods often attributed to religion be similarly of independent origin? History does not support the view that the actual religions of mankind have been the source of good only.

Despite the darker side of religion, such as uncharitable beliefs in hell, I doubt not that it lifts men above mere brutish existence and saves them from the deadening absorptions of the marketplace. Popular religions are doctrines of hope which sustain men's faith by assuring them that the world as a whole is not indifferent to their moral strivings. I for one cannot see in history or in nature any rational proof of "a power not ourselves making for righteousness." But surely the deeper religious consciousness recognizes that moral effort justifies itself apart from rewards or outer success. Rational naturalism and the great religions are at one in impressing us with the wisdom of humility and resignation. We are not gods, and cannot mould the entire world according to our heart's desire. But we can, by learning to face the truth, attain peace and freedom from vanity. God is not only an existent power but an ideal of holiness, which enables us to distinguish between the good and the evil in men and thus saves us from the idolatrous worship of a humanity that is full of fatal imperfections. Men need not live for ever or beyond the grave to attain true spirituality—to act with a view to the inherent quality of our acts and to see them as parts of the eternal web of the world.

> . . . For to bear all naked truths,
> And to envisage circumstance, all calm,
> That is the top of sovereignty.

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A SEARCH FOR SYSTEM

By G. WATTS CUNNINGHAM

Born 1881; Professor of Philosophy, Cornell University.

A SEARCH FOR SYSTEM

WHAT are my philosophic beliefs? Why do I hold them? These are the questions I have been asked to answer in response to my acceptance of the invitation to contribute to this volume of essays. My answer must needs take the form of an account of a search whose positive results (such as they are) have issued largely through negations—a search originally motivated by two basal demands of my nature. Of course the story can here be given only in skeleton outline, and personal influences apart from which the story might have been very different cannot even be touched upon. The broad psychological causes out of which my need for philosophy arose, with which I begin, will be stated as briefly as is consistent with the purpose for which they are even mentioned. Then I shall pass on to a consideration of the beliefs themselves, together with the reasons on which they seem to me to rest.

I

I was reared in a pious family set in the midst of a pious community, piety by common consent being equated with a strict orthodoxy (as locally understood) of beliefs and practices. Needless to add, I was pious after the same fashion. On the other side, I was intellectually curious; and any subject that presented a challenge was from the first welcomed and eagerly pursued. My early scholastic training was got in the public schools of the community, and during my period of tutelage the instruction varied in efficiency from mediocrity to excellence. But, fortunately for me, the more competent instructors came at the time of my most compelling need of them; and I was finally able to go up to college with advanced standing in several subjects. When I entered college I was thus equipped with a dual heritage: a vivid religious sentiment—which, thanks to my parents, had the saving salt of a vital connection with the business of living—and an open mind. Even then these sat rather loose to each other, and there were not infrequent conflicts between them; to bring them together has been the burden of my later development.

My earlier attempts to achieve the synthesis were, as was inevitable, characterized by failure, since they took the form of mere negations. Whether or not my later efforts have been more successful, they have at least been more in the open; and the progressive negations through which they have advanced have left a precipitate of positive content that presumably cannot be wholly explained by psycho-analysis.

As a raw undergraduate I was carried through the ordinary courses in logic, psychology, ethics, and the history of philosophy. I was also exposed to the intricacies of B. P. Bowne's theistic metaphysics. These studies interested me greatly, though, as I now recall, none had any marked effect on my general attitude. At the time my main interests lay in other fields, particularly in mathematics and literary studies. Meanwhile the demands of my religious consciousness had been set aside in a compartment by themselves, where, for the nonce, they were fairly quiescent; "reason's colder part" did indeed now and again throw a chill breath into the sanctum, but the heart's "I have felt" was generally able to melt it away.

Mathematics appealed to me because of its precision and certainty; literature, because of the emotional satisfaction it gave. As I proceeded to the higher mathematics, however, my interest in the subject gradually waned. I began to tire of what then seemed to be its perverse tendency to depart from factual situations and its consequent abstractness; and naturally I soon found myself engulfed by hypothetical formulations, the significance of which I did not see or care seriously to investigate. This, I now of course realize, was for me very unfortunate; but such was my weakness. So I turned my attention primarily to literature, which continued to attract me; here at least my emotional nature found expression.

The three years immediately following my graduation were devoted to the teaching of English in a small college, and the more literary side of the work brought deep personal satisfaction. But it did not wholly satisfy. Though not insensitive to the niceties of form, I was much more interested in what my author had to say than in the way he said it; and I usually found him

silent or speaking *ex cathedra* relative to my queries concerning justification of the position advanced. When confronted by the necessity of considering a poet's significance, for instance, or of comparing him with a fellow-poet and raising troublesome questions about relative merits, I invariably found my discussion very weak on the side of his 'literary form' and strong (after my own halting manner, of course) on the side of the content of his message. But when I asked concerning the truth of the message, I was left to seek alone. There was an uneasy feeling on my part that I was here entangled in a heresy, that "a thing of beauty is a joy forever," and ought to be a joy in its own right; but I remained bound in my sin. That other saying of Keats's,

> Beauty is truth, truth beauty—that is all
> Ye know on earth, and all ye need to know,

still had its appeal; and I even thought to save my soul through its repetition. But in my poor rendering of it there was always an emphasis which I did not seem to find either in Keats or in those who think with him on the point. As I understood it at least, that other emphasis now appeared certainly one-sided, and perhaps wrong; but how to modify the emphasis so as to remove my vague discontent remained for me an unsolved problem. And with this, my religious consciousness stirred again uneasily; if truth is imperious in beauty, why not also in good and God?

At this juncture I fell back upon philosophy, which I had never completely deserted. Attendance on the lectures of the late J. E. Creighton, of Cornell University, in the summer term of 1904 led me in the autumn of 1905 to enroll as a graduate student in the Sage School of Philosophy, where I found a group of scholarly and sympathetic instructors, to each of whom I owe much for whatever insights I may since have attained. In this fortunate environment I remained for three years, and it was during this period that my philosophic eyes were first really opened. The tradition of the Sage School in those days, as now, was to conduct the student along the historical avenue of approach. Under skilful guidance I was inducted into the major systems, with special emphasis upon Plato, Kant, and

Hegel. In these systems, particularly in the system of Hegel, I seemed to discern promise of what I had long vaguely and vainly sought. Henceforth my philosophic beliefs began to take shape with something of a reasoned foundation on which to stand.

II

From Plato I at the time learned little, though I hope I have later learned much. I was fascinated by his doctrine of Ideas, and especially by his treatment of the Good. Here I glimpsed a vista which seemed to open fruitful possibilities, but on the whole it remained for me a misty one. In later years I think I have seen more, and I am now inclined to attribute my first difficulties with the Platonic doctrine to a misconception of his two 'worlds' and their relation to each other. However that may be, I then derived little help from Plato with reference to my own special problem, though never did he send me away quite empty-handed.

With Kant the case was different. There was indeed much in him that I did not in the least understand; and not infrequently when face to face with him I was constrained to question whether it were not the part of wisdom for me to turn back and content myself with wallowing in the mire of inchoate or clamorous feelings. More than once he almost persuaded me that I could never be a philosopher. But in time I thought I could see through at least the outline of his analysis of experience. I was much impressed by his deduction of the categories—that is, by what of it I could understand, and this I naturally took to be fundamental; between the points I could not touch I made shift to swim as best I might. It was through Kant's eyes that I first saw the way past the withering atomism of Hume's "bundle of perceptions"; and, though the same conception has recently been presented in more compelling formulation, I see no reason to change my mind on the point—the answer to it that Kant gave seems to me in principle effective now. I thought, also, that I found in Kant the basis upon which could be built a satisfactory

defence of the validity of scientific and philosophic thought against the logic of the *Treatise*.

But on this point I could not see that Kant himself had done more than lay the foundation; his superstructure of the *a priori* forms seemed even flimsy. Any position in support of which its author could argue, for instance, on the basis of the assumption that space or time could be imagined apart from phenomena I could not but feel is in a state of very unstable equilibrium. But there were other, and for me at the time still more serious, logical difficulties with which Kant confronted me. I chafed at the bit which he insisted on putting between my teeth. He seemed to make a great deal of things-in-themselves, and from time to time he spoke of them with something like affection; yet he was constantly reminding me that truth is of phenomena alone. Of what significance, then, his truth could be and how by it he imagined he had escaped the dangers of Hume's scepticism or of Berkeley's subjectivism I was at a loss to understand; and I thought I could in this connection see the structure of the *a priori* exhibiting one of its loosest joints. Why he should have deemed it necessary to raise this bogey, and what use he made of it once it was raised, remained troublesome questions until I had caught the sinister significance of his statement, "Macht zwar der Verstand die Natur, aber er schafft sie nicht." There seemed little difference here between 'making' and 'creating.' Likewise, the dualism between 'pure' and 'practical' reason was for me a stone of stumbling. Of course, it was a separation which in my own incoherent fashion I had long since made for myself and with which I had for a time lived content; but now, in the same incoherent manner, I was struggling to surmount it because it no longer satisfied. And just at this crucial point Kant failed me. Nor was I greatly encouraged by the meagre results of his passage from morals to religion. I was convinced that the bifurcation of experience had something to do with the debacle, and I grew increasingly suspicious that this bifurcation was intimately linked with the form-matter dualism of the other *Critique*. My suspicion on this score was greatly strengthened by Kant himself, or at least by Kant as I understood him; for in the transcendental

deduction he had taught me that all such dualisms were justly to be held suspect. Thus, despite his explicit avowals to the contrary, he indirectly encouraged me to feel that my hopes were not in vain. What I wanted was a truth which was something more than mere 'validity' or abstract consistency, and a good which was something more than a blind and arbitrary feeling or an empty form; I was in search of a true which was also real and a good which was also rational. Kant led me to think that such was possible, and he even seemed to point the direction in which it might be found. But the synthesizing principle, so far as my understanding of Kant carried me, remained a desideratum only; and for a time I drifted rather helplessly and narrowly escaped a pretty thoroughgoing scepticism.

The Hegelian tradition, then dominant in the Sage School, came to my rescue. I entered upon the study of Hegel with avidity, and, as best I could, I followed his principles through their elaboration in his own writings and in those of later representatives of the movement. From Hegel himself I caught a glimpse of the synthesis I had long desired—a synthesis through which reality was brought to thought, and will and feeling were linked with reason. The enthusiasm with which I welcomed this insight is evident in the monograph[1] in which I set down the results of a rather assiduous study of Hegel's system.

Turning the pages of this essay, I find that from Hegel I then gathered the following views: (i) thought is genuinely objective, transcending the relativity of individual experiences through its inviolable contact with and determination by things-in-themselves; (ii) thought is not bare abstract cognition, but includes within itself so-called intuitive perception, feeling, volition, as well as cognition, and is adequately described only as the unifying principle within experience; (iii) thought is a process of mediation which proceeds from immediacy to immediacy through the power of the 'negative,' that is, through the removal of inconsistency within any given immediate and the

[1] *Thought and Reality in Hegel's System*, 1910. Though remaining by the main theses of this essay so far as its exposition goes, I am now inclined to think that some of its evaluations are perhaps more enthusiastic than true.

consequent subsumption of it within a 'higher' immediate—an immediate involving less of discrepancy and imperviousness to thought; (iv) this process is a progressive definition of reality, since every immediate to which thought is driven is an aspect of the real, and since reality functions throughout the process; (v) the final immediate of thought—the immediate in which thought at last rests—must be said to be the absolute real, and is neither an abstract particular nor a blank universal, but the universal filled, the particular completed by its own ideal construction, in a word, the individual; (vi) this final immediate of thought is one in the dual sense of being both systematic and all-inclusive, and perhaps may be termed self-conscious. So far as I understood them, all of these views I was at the time inclined to accept without criticism, with the possible exception of the monistic implications of the system, which troubled me largely because of their obstinacy with reference to the sort of individuality which I seemed to experience within myself and to find among my fellows.

In the writings of Bradley, Bosanquet, and Royce, as in the lectures of my instructors, I found much enrichment of the Hegelian principles. In their hands the dialectic method descended more obviously into the concrete whirl of factual situations, and, to my mind, gained immensely in power thereby. Their treatment of the immediate and its self-transcendence in thought, their insistence on the futility of the older epistemological controversies and their fortification of this position by masterly expositions of the various forms of knowledge in development, their opposition to associationism and atomism and their substitution therefor of the organic and systematic view of mind, their emphasis upon and elaboration of the psychological and social matrix of the self—all of this appealed strongly to me and added much wealth of detail to some at least of the principles which in Hegel had apparently received only skeleton treatment. Here I followed gladly.

But the new insistence on the Absolute gave me pause. Here I could follow only from afar and with progressively hesitant steps. The constantly repeated assertion that time is of phenomena

only, that reality, though including time within itself, is nevertheless trans-temporal, deepened the suspicion already aroused by Hegel and raised questions which I nowhere found answered to my satisfaction by my guides. I was curious to know what, on such a view, one could say concerning the apparent inseparability of time and the 'individual' which all along I had supposed was in some sense to be equated with the real. It had been maintained (this I thought was the lesson) that the nisus of thought was towards the 'whole,' that the whole as experienced always implicates its own transcendence, and that reality is what thought, functioning within the given, compels us to affirm. But I now seemed to be confronted by the consideration that reality, real reality, is quite other than what seemed to be the implication of these principles—that it is a static whole in no sense involving a nisus, and even so ineffably perfect that the drive of thought itself pauses helplessly at its threshold. Why the impasse? Bradley's "happy suicide" of thought seemed to amount to little more than confession of failure. If it is thought's function to expand the real by ideal construction, why should reality suddenly grow so great as to pass beyond it? If, on the other hand, reality does at length negate thought, what boots it to add that thought foresees and acquiesces in its final humiliation and rejection? If thought is in indissoluble touch with the real anywhere, it ought apparently to be so everywhere. And if it finally fails us, there is little consolation to be had from the consideration that it at least carries us to the top of the mountain—unless, indeed, another guide is ready to hand to see us safely into the promised land.

> The little more and how much it is,
> The little less and what worlds away.

But I could not see, on the other side, that efforts to make the non-temporal Absolute intelligible were successful. Royce's appeal to the *totum simul* of the scholastics and his analogy of the span of consciousness plainly would not do, as Bosanquet himself observed. My main difficulty with Royce's position, however, was not that which Bosanquet points out. What is said

in criticism of it seems indeed true. That in an all-inclusive consciousness events could not lie side by side precisely as they are in a finite span, but must necessarily suffer some subtle sea-change because of the inevitable modification of the earlier by the later—this seemed plausible. For surely it is hardly to be supposed that omniscience would "see in any lapse of successive events nothing more than a finite being would see so far as he followed that identical lapse." But my chief trouble was with the prior question whether, following the method on which we all seemed to be agreed, there was any logical necessity for positing such an all-inclusive and non-temporal reality by whatever name designated. So, while agreeing with Bosanquet that Royce had failed in making the Absolute intelligible, I was still forced to doubt that Bosanquet himself had succeeded any better, or that anyone could succeed starting from our common premisses and following our common method.

This doubt on my part rapidly grew into a settled conviction, and the process was hastened by my study of the writings of Bergson.[1] James's oft-repeated criticisms of the "block universe" had, I think, very little influence on me. His criticisms were too intimately bound up with his peculiar view of the pragmatic theory of truth to take hold of my imagination; for, as formulated by him, the pragmatic theory of truth seemed to me either obvious or false and, as obvious, I could not see that it touched my problem in a very significant, certainly not in a definitive, manner. Nor did Dewey here render me any great assistance. His formulation of the pragmatic doctrine under the concept of instrumentalism and his consequent insistence upon the function of the factual situation in the process of thinking had all along appealed to me as in principle sound; but, having gone so far, I was at a loss to understand why he was not logically bound to go farther, and where he stopped (as I supposed, at least) I could not see that we were in touch with my own special difficulty. Very probably all of this was in error, and doubtless these two protagonists of pragmatism had much more to say to me than I, at the time and under the conditions, could hear. I now think

[1] *A Study in the Philosophy of Bergson*, 1916.

this was certainly true of Dewey. Be that as it may, it was rather the pattern of Bergson's thought which, on one important side, fitted into and supplemented my own. To be sure, my reaction to other aspects of his view was rather decidedly negative, and particularly on a point which I shall indicate below. But his conception (intuition?) of duration, in so far as that is to be identified with his view of the deeper self as distinguished from the other self which is the 'external projection' of it and his correlative view of time as a whole of mutually interpenetrating parts, was to me of the greatest assistance. Here I found a 'whole' which, so far from excluding time, was constituted by it and was also experienceable and (in my terminology) intelligible.[1] I found here also further confirmation of my feeling that existence is indissolubly linked with time, at least the sort of existence which we experience directly within ourselves and which to us is in the end alone intelligible. So it seemed to me a short step to the identification of this sort of 'whole' with reality—if, that is, we could take our own existence as a privileged instance. At any rate, there was (so at least it now seemed) no contradiction involved in the step. But it also seemed clear to me that this conclusion was not foreign to the tradition which hitherto I had followed; on the contrary, I thought I could see that it was necessarily implicated in the premisses and method of that tradition. Thus I found myself confronted by a dilemma: "either the organizational theory, accepted with explicit avowal of its implications concerning the ontological value of time, or the admission of the final bankruptcy of the concept of a 'world'." [2] And I was committed to the first alternative.

But I could not follow Bergson in his conception of 'creative evolution.' My main difficulty here was linked with the other side of his view of duration. His very suggestive analysis of conscious experience I found incomplete and negligent of what I was compelled to regard as one of its basal features. He insisted upon describing it wholly in terms of the past overflowing into

[1] On Bergson's 'intuition' see *op. cit.*, Chapters III, IV.

[2] "Coherence as Organization," in *Philosophical Essays in Honour of James Edwin Creighton*, 1917.

the present, and so as purely heterogeneous; but I could envisage it only as fundamentally teleological and end-serving, and apart from the teleological dimension of experience I could not see that either past or present possessed meaning. This feature I thought became still more clear and significant when experience was considered at the level of inferential knowledge and moral endeavour. Now the notion of creative evolution appeared to be rooted in this basal error of analysis, and in the end to be meaningless. The view of the world-process as an aimless activity of a blind original impetus differentiating itself, for no assignable reason, into equally blind tendencies directed upon the impalpable void—this view seemed to be Bergson's creative evolution, and such a view I could only regard as factually groundless and in its own right even self-contradictory. So I was constrained to substitute for it another view which I ventured to call 'creative finalism.' According to the summary statement of this view I then gave, "creative finalism views reality as an organic process which is through and through teleological. Its fundamental nature is to create ends, to produce tendencies, and to govern itself according to its own creations. These ends are progressively defined and revised with the advancing process in which they operate; they never can be finally and completely defined, and the process is, therefore, unending. Its homogeneous nature is necessitated by the fact that within it there is always an ideal dimension by means of which its past and future are inextricably involved in each other; this ideal dimension, the dynamic imagination, functions in the present and binds past, present, and future into an organic whole. Though it can never be described as *just this* or *just now*, still it is always identical with itself and possesses a determinate content." And I thought this view to be in harmony with my tradition.

In very sketchy outline, such is the *Weltanschauung*, of which in 1916 I supposed myself to be in possession, and such are the broader influences instrumental in its formulation. Naturally my whole edifice had all along been blown upon by other winds of doctrine, though without very marked results. Latterly, however, some of these winds have mightily prevailed, and at

least some parts of my superstructure have been rather seriously affected. A more intimate acquaintance with, and penetration of, pragmatic and realistic doctrines (through various media too numerous to mention here, but the writings of Dewey, Russell, Whitehead, and Alexander should be particularly noted) have forced modifications more or less profound—so profound, in fact, that the question now is, What remains? In undertaking to answer this question I can do little more than direct hasty glances at the foundations. And the discussion must be carried forward without further references to historical affiliations, though justice and gratitude alike impel me to acknowledge my great obligations to Viscount Haldane. My reformulations owe much to contact with especially his later views.

Taking stock of the present situation, I seem to find some of the older views which still stand and others which have more recently developed. I shall list them under the headings of (1) method and (2) problems and results.

(1) As to method, I hold the following views: (*a*) the method of philosophy is the method of reason; (*b*) the method of reason must be described through analysis of the problematic given, in which alone thought functions, and such analysis reveals that thought is the interpretation of system; (*c*) the problematic given controls (ideally) the process of thinking and is not made by it; (*d*) the criterion of truth is control by the given, which is equivalent to saying that system is the criterion. (2) As to problems and results, I seem to discern the following: (*a*) the difference between science and philosophy lies, not in method, but in the degree to which use is made of the common criterion; (*b*) in a sense we are all absolutists, though the assumption that in the end the absolute is self-sufficient as both all-inclusive and non-temporal is doubtful, and, in any event, must be settled by factual considerations and not by merely *a priori* argumentation; (*c*) the nature of thought is to assert truly, and there is no sheer error; (*d*) 'existence,' 'reality,' and 'object of thought' tend to fall together, but there are distinctions among them which in principle are important. In what follows I shall try to draw out these several points by more explicit statement, and I can only

hope that my necessarily dogmatic assertions will not in the end remain enigmatic.

(1) Method

(*a*) That the method of philosophy is the method of reason and not of some non-rational feeling or intuition I base mainly on the two following considerations. The method of reason is a method of which we do make use with some degree of success, and in science at least there is no question of any other; it should therefore be applied in philosophy as far as it will work and until it can be shown definitely to break down. Its incompetence in philosophy has not been proved by those philosophers who have most vigorously pushed the claims of another method; on the contrary, such philosophers have found themselves at the last forced either to fall back upon reason or to remain content with what logically is an unutterable mysticism. Beyond further elaboration of these points with an eye open to the precise use of terms I hardly know what more one could say on the matter, except to remark that the position here defended does not imply the denial that parts of the universe may fall beyond the reach of thought, but only the insistence that, if they do, they are of no concern to philosophy.

(*b*) The more important question concerns the nature of the rational method. Here fateful divergencies in philosophy have their origin, and I submit that the answer to the question is of basal significance. I have above asserted that the method of reason is in point of fact identical with the interpretation of the problematic given, and I now wish to develop this further.

I am, in the first place, confronted with the prior question of the given. And in this connection it seems important to note that there is a difference between the mere given and the problematic given. By the mere given I understand that which is presented as a self-contained fact without either inner discrepancy or outer implications. By the problematic given I understand that which, because of internal discrepancy or external reference or both, comes as a challenge. These two types of the given are quite distinct, and the distinction is for method important.

With reference to the mere given I must here content myself with the following observations. No such given is found in experience, and were it found there it could not be for thought a point of departure. Every datum within immediate experience is unstable; what seems to be fixed and hard turns out to be derived through a rather elaborate process of mediation—a process identical with that which Hobbes named 'resolutive'—as is illustrated from different angles by Bradley's primal feeling or Russell's logical atoms or Bergson's duration or Santayana's essences. Furthermore, such a mere given would necessarily fall in wholly non-reflective experience, and would consequently remain for thought intrinsically barren; this, I think, has actually been shown by Dewey, though I have no warrant for appealing in this connection to his authority, and I myself first learned it from Hegel. Thought takes root only within a problematic situation, no problem, no thinking; and what is taken as a non-problematic datum is precisely the outcome of the resolution of the problematic where analysis is supposed to rest, and which is then viewed in isolation from the process whereby it has been attained. A mere datum means nothing until it becomes problematic or emerges through the resolution of the problematic.

For me, then, the given which is a problem is alone the starting-point of thought, and the process called thinking is nothing more than the interpretation of such a given. And here are involved two basal considerations that must be dwelt upon for a moment. There is the problem and there is the problem-solution, and both are essential to a complete act of thinking; thought is at once a problem-raising and a problem-solving function. Of course there is no intention to hold that every problem raised by thought must be solved then and there, or even anywhen and anywhere; nor does the position here advanced involve such an absurdity. That not every act of thought is complete is clear, otherwise scepticism would never have been heard of; and the view that thought functions only within a problematic situation is open to admit this. The point is that within the situation in which thought functions there are both a problem and something relevant to its solution, and if either of these conditions

were absent the situation would not be thought-provoking—would, in short, not be problematic. I wish now to press this matter further and ask why this is so.

The answer would seem to be that the problem and its relevant material are inseparable, and either taken alone is an abstraction: remove either, and the other disappears. Without the relevant material there would be no problem, for the problem is precisely conflict and discrepancy among the elements of the situation, and cannot hang by itself unsupported. A problem in general is meaningless, and a particular problem is just what the terms connote—a conflict within a given situation. And, of course, where there is no problem there can be no problematic stuff; there relevancy would be meaningless.

From these considerations it follows that a problematic situation is *eo ipso* systematic. There is no clash without system, and there is no relevancy without system; both alike involve identity. There is no clash between Abracadabra and Socrates until the two are conjoined in a synthesis and made elements of a common whole; and then only does anything gain relevancy with reference to them.

Furthermore (and here we pass to a very important matter) there are two logical possibilities with reference to the system. It may in fact be self-sufficient, or it may be self-transcendent. If it were self-sufficient, two conditions would have to be met: both (i) the problem itself and (ii) the solution or relevant material would fall wholly within it. In other words, the problem would emerge from the elements of the given situation, and from them alone; and the solution would seek and find among these elements all its relevant material. In this case we would have an 'absolute.' Were these conditions not met, the system would not be self-sufficient. It would have to be transcended. The nisus to its transcendence would lie within the situation itself, otherwise thought would have no ground for passing beyond. And the transcendence might go in either, or both, of two directions. On the one side, the problem might not be explicable in terms of the situation itself—as happens when the problem grows out of previous situations—and then the system is transcended in

the direction which I may here designate as backwards. On the other side, and forwards, the system would be transcended when relevancy leads beyond it. All of this could be put in another way by saying, more technically, that the system may be wholly immediate[1] or mediated beyond either from above or below, or from both directions at once, and in any event its transcendence would be a *self*-transcendence.

(*c*) Again, the system controls thought and determines its functioning. And this holds whether the system is of the 'real' or imaginative, the veridical or the illusory, the factual or the evaluative. The problem is nothing but a discrepancy among the elements of the system, whatever they may be; and the relevant material is precisely those same elements in relation to that discrepancy, so the solution must have its habitat there. This would be the case, ultimately, only where the situation is self-sufficing. But even where transcendence is present, it is the implications of the situation that lead beyond, and this self-transcendence of the system is still the guiding principle. So we may say broadly that thought is controlled by its system, either as self-sufficient (if such there be) or as self-transcendent.

(*d*) Finally, the criterion we are bound to follow by this method is the criterion of system—the criterion imposed by the situation in which thought functions. True thought solves its problem accurately; the accurate solution of the problem is attained when the conflict is finally removed, and this result is accomplished through the systematization of the conflicting elements. If the system is self-sufficient, the problem is finally solved and the truth absolute; if otherwise, the problem is partially solved and the truth hypothetical.

(2) Problems and Results

Bottoming myself on the preceding considerations of method, I go on to draw, among others, the following general conclusions:—

[1] That is, with reference to a beyond; for me it would, of course, involve mediation within itself.

(*a*) So far as method is concerned, I of course see no difference in principle between science and philosophy. Each follows essentially the same method, and each is controlled by a common criterion. This is not to deny that there are differences of detail in technique; there are such differences even among the sciences themselves. But, as among the sciences so between science and philosophy, these differences arise from variations in the material dealt with, not from variations in principles of method. In science as in philosophy, the situation is always a problematic situation, and the business of thought (scientific or philosophic) is to interpret the situation so as to remove discrepancies from it; and it is the situation which determines and directs.

The difference between science and philosophy lies partly in the types of system under consideration. But the more significant and definitive difference, I think, is to be found in the attitudes assumed with reference to system. Broadly speaking, and subject to correction within limits of the principle, science is concerned with systems which *ad hoc* are assumed to be self-sufficient, or at least it is not concerned to raise any question with reference to such self-sufficiency; while philosophy is primarily interested to inquire whether any system is self-sufficient and on what assumptions it may be held to be so. Otherwise expressed, the main problem of philosophy is precisely the problem of system; science ordinarily assumes (tacitly or explicitly) system and works within that assumption.

The scientist may grow wary of the self-sufficiency of his system and raise questions about the beyond; in so far he becomes philosophical, and precisely because his concern is now with the scope of his system. The philosopher (as ordinarily meant) may, on his side, become a specialist and limit his inquiries to a system assumed for the moment to be self-contained; in so far he is strictly scientific, and he is so because he is then working within the attitude of the scientist. When the scientist raises questions as to the extent of his system, he is engaged with the philosophy of his science. When the philosopher arbitrarily limits his inquiries to a given system and works wholly within it, he is not a philosopher in the sense in which one would be said to be who is

primarily alert to the self-sufficiency or transcendence of systems. And I think at least clarity might be gained if we would make this distinction explicit in our technical terminology.

While on this point I may, in passing, state what seems to me involved with reference to the question of religion. Religion—meaning by it the attitude of what is commonly referred to as the 'religious consciousness'—is like science in that it assumes a self-sufficient system, but it is quite unlike science in that its system is not *prima facie* supposed to be amenable to thought. It is wholly unlike philosophy, which both follows reason and assumes no ultimate. When religion turns theological, its attitude may be said to be scientific, in that it now invokes reason, but only within set limits, though it may be very unlike science with reference to this assumption. On its side, however, science has at times been quite dogmatic, and it is not easy to say off-hand which is the narrower dogmatism. When religious thought becomes sufficiently open-minded to entertain, and even to push, serious inquiry into the self-sufficiency of its system, it has then become philosophical.

(*b*) If at this juncture the traditional absolutist were to interrogate me, I should be embarrassed. Under pressure, the best I could do, I presume, would be to call for some distinctions and answer accordingly.

In one sense of the word I certainly am an absolutist, and I do not see how any of us (whatever our method) escape from being so. We all seek for that which gives us final satisfaction; that we call the real, and that is what I understand the absolute in principle to be. Where we rest from our intellectual labours, there is the absolute. The question that really divides us is whether there is any justification for writing the word with an initial capital. For my part, I see no compelling reason for this; yet my principles seem to drive me farther, and the embarrassing question is, How far am I driven?

I am committed to the view that it is intellectual satisfaction in which alone we can finally rest, and nothing short of a self-contained system will give such satisfaction. This follows from my view of the nature of thought and the situation in which it

functions. If, then, self-containedness is equivalent to all-inclusiveness, I am logically obliged to accept ontological monism. But are these equivalent? So far as I can see, *a priori* argument throws no special light on the question; from the controversy about terms and relations very little help is apparently to be gained. Relations actually do relate, I take it, and all terms are in some sense related. At least, I seem by my principles to be committed to this, nor am I able to understand on what grounds one can hold that terms are not modified by the relations which actually do relate them. But I do not see that this carries us very far with reference to the point at issue. The question, as I see it, is what terms are actually related and how. Now I should certainly contend that this question is to be answered (so far as it may be answered) through the activity of thought; but I am bound to hold that the activity of thought can do nothing more than disclose the terms as actually related. In other words, if ontological monism is true, then any problematic given must implicate all there is; but whether such is the case is a matter of fact to be revealed (if at all) through the activity of thought following the implications of its factual matrix under the control of which it functions. On the other hand, I do not find that the systems of thought speak unequivocally on the question. The self-encased entities that have been offered in evidence as supporting pluralism —the various 'simples' and finite 'wholes'—seem to involve implications beyond themselves; whatever else they may be, they certainly do not appear to be unmediated immediates. Nor am I able to discover any for myself. And yet there do seem to be systems that are quite loose each to the other; there is no clear implicative relation between the colour of my hair, for instance, and that of the ring on my finger, though it is not at all impossible that further clarification might reveal such a relation. And it is precisely this confusion and ignorance which is the source of my embarrassment in discussing this phase of the question. I see no reason why a self-sufficient system might not be one of many, but I find none such among the finite systems known to me.

With reference to the non-temporal aspect of the traditional absolutism the matter seems more clear. That a self-contained

system may lie in time presents, so far as I can see, no very great difficulty. The argument that such a system involves a self-contradiction would appear to beg the question, since it rests upon the assumption that a dynamic system must necessarily depart from its own basal nature to become something other than itself, and this is just the point at issue. This assumption can be traced to another, which I must hold is false. That is the assumption that the identity in thought may be defined once for all in terms of judgment taken in bloodless isolation from its concrete setting. To this must be opposed the consideration (necessitated by my principles and, as I think, by the principles of those who in this connection disregard it) that the 'unity' of judgment is itself nothing more than the system judged about. Whether there is a self-contained dynamic system, then, is once more a question of fact. And, as I think Bergson has shown, our own conscious life furnishes us with an illustration of what such a system might be. Of course I do not suggest that the finite self is a self-contained system; but its incompleteness is not due to the fact that it is characterized by change. It is incomplete rather because it gets its filling from beyond the circle of its inner nature, from an environment which remains alien: expand it till all the material necessary for its expression were within it in the sense in which the content of ideal thought is its own object, and it would be a self-sufficient system, however much it might be featured by change. The complete is not necessarily the complete*d*; a system may be unfinished, and yet all of its implications fall within itself. And I think the principle here would hold of a system which could be said to be 'all there is,' if there be such a system.

I may add by the way that it is precisely because of its bearing on the above problem that the problem of mind seems to me as significant for philosophy as it is for the social sciences. But I must turn to my third point.

(*c*) Thought is the interpretation of the problematic given which, on analysis, is seen to be system. The nature of thought is to disclose the elements of system in their implicative relations; or, to borrow Bosanquet's expressive phrase, thought is the

'active form' of system. This is what I understand by the trueness of thought. Thus I hold with Bosanquet that the nature of thought is to affirm truly. And yet more often than not thought is erroneous. But I do not see that there is any contradiction between these two statements, unless one identifies error with sheer error. And to do this is meaningless. That there is error arises from the fact that thinking is a process in time, and therefore cannot take everything at once and completely; the complex implications of the problematic situation outreach thought's vision. Even so, however, erroneous thought is in an important sense true—in the sense, namely, that errors are always implications. In the realm of thought there are no sheer errors, there are only mistakes—actual implications linked with systems to which they do not belong, self-transcendent systems taken as self-sufficient. Herein lies the power of self-correction, which is a basal characteristic of thought; a partial truth may be completed, and even demands that it be. A sheer error, however, remains incorrigible, and can be met only by a bare negation; but in the end both alike are meaningless and fall, if anywhere, in the realm of the thoughtless. And all of this, I suppose, is little more than a restatement of Hegel's doctrine of 'negativity.'

(*d*) To ask, then, whether sheer error is non-existent raises the larger question: How does the existent stand in relation to the object of thought? And here definition is at once imperative.

If we are to understand by the existent merely what in any sense, intelligible or otherwise, is, or may be said to have being, then *cadit quæstio*. The answer is both obvious and insignificant. There is certainly no justification for supposing that what exists in this sense must be an object of thought. Of course, every object of thought would be an existent, but so might much else besides, and there is no way of determining how much or what. Here unbridled fancy is given free play, and any abstract possibility may be an actuality.

If, however, the existent is to mean what has being in a manner such that the 'go' of it may be known, the situation becomes different and the question intelligible. On this assumption the

existent must be said to be an object of thought. But here it is necessary to note certain important distinctions.

By an object of thought I understand broadly the system in which thought functions and which controls. But this system presents different aspects, and these should be distinguished. In the first place, it may be regarded as either actually or possibly controlling thought; that is, it may be the object of an actual or of a possible thinker. Again, the system may be taken *ad hoc* in immediate practical relation to an actual thinker, and only as thus related. And, finally, it may be taken as the entire set of implications of which thought (actual or possible) is the active form. When taken *ad hoc*, I shall call it a *psychological* object of thought; when taken as the total system of implications, I shall call it the *logical* object of thought. I regret using these terms, but at present I can think of no better; in any case, it is the distinction which is emphasized and which is important for the argument, not the terms used to indicate it.

Going back on our question with this distinction in mind, I should want to say that the existent may be a psychological object of thought, and that it must be a logical object of thought. It may, but need not, be an object for a thinker; but it must either be, or be within, a system. In other words, "to be" is not necessarily "to be perceived," but it is necessarily "to be implicated." And this conclusion follows from our preceding considerations, granting that existence is to be taken as a concept meaningful for philosophy.

Am I, then, to say that existence and reality are equivalent terms? Not precisely, and here another distinction remains to be noted. There are two aspects of the logical object of thought: it is (i) terms-as-related and (ii) terms and relations, a whole with separable elements. And there is a difference according as it is taken from one or the other angle—a difference in principle the same as that between Spinoza's *natura naturans* and *natura naturata*. This would appear to be a difference of importance, and words are needed to mark it. I should wish to limit the connotation of the word 'reality' to the logical object viewed in the first sense, and to use 'existence' to refer to the same

object in either sense indifferently. The real, then, would mean the logical object as system; the existent would mean the same object either as system or as parts. The two terms thus are co-extensive in the sense that if X exists it is real, or if X is real it exists; but they are not identical, since an existent may not *per se* be real. This is to fall back, of course, upon the principle of the traditional doctrine of degrees; but I fail to see that we do, or can, escape the principle, however we choose to symbolize it.

Returning to the question with which the discussion of the point began, the intervening considerations would seem to lead us to hold that sheer error is both unreal and non-existent. And so, it would have to be added, is everything else which like it is to have no implications for thought—which, that is, is to have nothing to do with system. Round squares and golden mountains exist only in a universe of discourse wherein they have significance; and only if they can be subsumed in system may they be said to have reality.

If I am not shamelessly to transgress the limits of space allotted to me, I must in conclusion content myself with the barest reference (which is not at all indicative of my estimate of the subject's importance) to the recent epistemological controversy as carried forwards by the realists. At times it has seemed that the debate has gone on the assumption that the object of thought is the mere given; and, of course, in so far as this assumption is made the discussion is at once thrown beyond the reach of my method. Within my principles, however, and with suitable modification of details, there is room for both 'subsistences' and 'essences,' provided neither is so conceived as to push it outside of the real in my sense. If analysis would be aided by these further distinctions, I should be free in principle to accept them. But I should be forced to hold that analysis does not necessitate them, except in so far as they are merely distinctions among implications terminating in the object of thought; if left *in limbo*, they are from my point of view worse than useless. And I am especially fearful of essences in this regard. What I seem to miss in the dualist's account is a precise connection between essence

and the situation from which it is resolved. What I should ask of him is that the linkage be made sufficiently strong to prevent essence from tumbling backwards into the abyss of sheer error. But, if this request be granted, it is not easy to see wherein his dualism lies. For then essence would appear to merge into an implicative relation and, so, to be something more than the *what* of the real thing "divorced from its *that*." If essence is relevant to the object of thought, it would seem *ipso facto* to be an aspect of system; if it is not so relevant, there would appear to be no need for further complicating the situation by the addition of an abstraction. But to argue this in detail is here impossible. And I will conclude by stating my general principle: if the subsistent and the essence are to be distinguished from the existent, the demand for such distinctions must have its locus and motive within the situation itself, and the meanings attributed to them must attach to the system from which they are resolved.

What in the above general observations is old and what new is a question which might legitimately be raised, and in reply I should certainly not be inclined to make any claims to novelty. To myself (if I may presume to adapt Bradley's statement to fit the case) all of them appear to have been mainly borrowed, and if I had only succeeded in borrowing more I probably in the future would have less to modify or retract.

PRINCIPAL PUBLICATIONS

Thought and Reality in Hegel's System (Longmans, Green & Co., 1910.)
A Study in the Philosophy of Bergson. (Longmans, Green & Co., 1916.)
Problems of Philosophy. (Henry Holt & Co., 1924.)
Five Lectures on the Problem of Mind (University of Texas Press, 1925.)

THE PHILOSOPHY OF A MELIORIST

By DURANT DRAKE

Born 1878; Professor of Philosophy, Vassar College.

THE PHILOSOPHY OF A MELIORIST

I. Personal

If there is any keynote that has given a hint of unity to my thinking in diverse fields, it is a sense of the needless unhappiness from which men suffer, and a passionate longing to do my bit in formulating and diffusing a clearer intelligence concerning the art of living than I commonly find among my fellows, or have applied in my own life, as I have groped my way toward a greater *Lebensweisheit.*

The Philosophy of a Reformer, I thought of calling it. For I have the blood of the Crusaders in my veins, and I agree with Mr. Wells that "satisfaction with existing things is damnation." Surely we are called upon to spend ourselves without stint in the war against evil, and to lead the way, as the measure of our insight and power allows, toward that goal of rich and adventurous happiness which human life so pathetically seldom attains.

But I am keenly conscious that a reformer becomes a disagreeable and pernicious person when he thrusts his own particular nostrum down the throats of his fellows. The ways in which life may realize itself are manifold, the forms of possible happiness beyond the imaginative grasp of any one philosopher. We must guard against destroying needlessly any humble pleasure or any joy outside our own ken, in our zeal for the realization of that ideal, however lovely it be, which has captured our own imagination. To all zealous crusaders for a Cause, Santayana's words are a necessary warning: "Alas! Their propagandas! How they have filled the world with hatred, darkness, and blood! How they are still the eternal obstacle, in every home and in every heart, to a simple happiness! . . . I wish individuals, and races, and nations, to be themselves, and to multiply the forms of perfection and happiness, as nature prompts them."

But while the lover of human happiness should be catholic in his sympathies, quick to understand and slow to reprove, he cannot fail to see how needlessly mean are most men's lives; how crushed by a hard and ruthless industrial order; how cramped

for lack of a liberalizing education; how blocked by a thousand stupid prejudices, superstitions, taboos. Without being so presumptuous as to suppose that he has found the ultimate truth, he will know that many of the ills from which men suffer are curable, and that philosophy, though worth cultivating for its own sake, will be judged in the end, as will every art and science, by the contribution which it has made to the welfare of sentient beings.

This at least has been the faith which has underlain my mental history. The particular events in that history are hardly worth retracing. I have come under many influences, of which the most important, perhaps, were my Christian (New England Puritan) upbringing and the philosophical atmosphere of Harvard at the turn of the century, when James, Santayana, Royce, Münsterberg, Palmer, and Dickinson Miller formed a galaxy whose like was not elsewhere to be found. My ardently religious bent was given the critical discipline it needed by the wise and scholarly teachers of the Harvard Divinity School. A later year at Columbia introduced me to Dewey, Woodbridge, and Montague, whose philosophy, in some respects alien to my earlier teaching, slowly but eventually penetrated to my consciousness. In the meantime I had been impressed by Mr. Strong's writings; and the correspondence and prolonged conversations which I have had with him during the past dozen years have been of the utmost value to me.

Like most students of philosophy I have crystallized my ideas through oral presentation before committing them to writing. My experience in teaching has been varied: first at a co-educational university, then at a college for men, and now for fourteen years at Vassar—the first college for girls to take rank by the side of the great men's colleges, and now, with its liberal curriculum, its magnificent plant, and its highly selective method of admission, more than ever in the forefront of agencies for women's education. This vocation has done what it must always do for an eager and devoted teacher—kept me in contact with growing minds and constantly at the business of questioning and reformulating my beliefs.

At Wesleyan (in Connecticut) I had to teach for three years courses in Bible; and during that period I made a careful study of the life of Jesus, my chapter on this subject in *Problems of Religion* embodying some conclusions then considered radical, but now becoming more familiar. At Vassar I have taught, in addition to my philosophical courses, the history and philosophy of education, and had some hand in educational conferences. For some years I was a member of the Council and of the Advisory Committee of the Religious Education Association, and have been (I am afraid) one of the most talkative members of the Theological Society, which we have lately made over into the American Theological Society, with Eastern and Western Divisions.

I have lived and travelled much in Europe, believing earnestly in the importance of international friendships and an international outlook. In accordance with this conviction I accepted invitations to lecture at a number of universities and clubs in Switzerland, Germany, and Italy in a sabbatical year, 1923–4, my aim being primarily to explain as well as I could in the various languages, of which I am none too proficient a master, the ideals of America. This subject I had already discussed in English in *America Faces the Future*. Needless to say, my interest was not in a complacent glorification of American life, but in summoning my countrymen to be true to the splendid visions of our forefathers, as yet very imperfectly realized in practice, and in asking sympathy from Europeans with our strivings. Conversely, I have tried to understand sympathetically the ideals of the leading European peoples and parties—including the Russian Communists, whose spirit and achievements have seemed to me, as they have to so many other impartial observers, of the utmost significance for the future of mankind.

Such, then, is the background of my thought. And now I will try to summarize the conclusions to which, through these years of study and teaching and lecturing, I have been led. Space does not permit me to show the grounds upon which I hold them; I must therefore present them with an appearance of dogmatism. But they are all, of course, tentative and subject to revision;

and my defence of them is, I hope, good-humoured and not without a sense that I may be, on any point, entirely mistaken.

II. Methodology

There is no work more important for the forwarding of human happiness than that of teaching people to love honest, fearless, open-minded, exact thinking, and to hate prejudice, dogmatism, and loose reasoning. But to think clearly and honestly demands self-restraint in belief, the habit of mental wariness, a keen scent for one's own unconscious prejudices, and, above all, a readiness to discard beliefs which it is comforting or inspiriting to hold. The average person shuns unpleasant facts as he shuns unpleasant people. Yet an unflinching facing of facts is our only road to salvation, since it is in the world of importunate facts that we have to live. So anything that fosters the habit of easy credulity is bad for us, and the "will to believe" is a dangerous self-indulgence. "The right to believe," James once told me (as he doubtless told many others) he wished he had called that famous essay. I loved the man—who did not!—but I felt then, and I feel still, that the doctrine has had a very demoralizing effect upon philosophy. If there is evidence of the truth of any hypothesis sufficient to convince the clear and unbiased mind, there is no need of any will to believe, and no question of any right; if there is not sufficient evidence, to believe because the belief "meets our needs" or "satisfies our religious natures" is an attempt to escape from reality, and is fundamentally dishonest. In the end, it will not pay. In the end, men must learn to adjust themselves to the world as it is, instead of imagining the world to be as they would like it to be. Our wills, our "needs," our "hearts," cannot tell us what exists; only empirical evidence, such as the trained scientist seeks, can do that. Philosophy must be as objective, as disinterested as science, if it is to be equally successful.

The history of philosophy, as too often taught and written up, glorifies that speculative originality, that pretentious completeness, that reverberation of moral and religious "needs," that disguised exercise of the will to believe, which characterize the

systems of so many of the philosophers called great. Their grandiose vistas are far more alluring than the patient spade-work of the more critical, cautious, self-restrained thinkers. But to my mind a college teacher should beware of attracting young and impressionable minds to the fascinating dreams of the great irresponsible speculators, should expose their unconscious prejudices, their incaution and wilfulness, the futility of their attempts to find short-cuts to truth. After all, there is a technique of truth-seeking. Is it not time that philosophers developed a professional code, branding obviously specious reasoning, and what Mr. Overstreet calls "wish-thinking," as unprofessional?

With our best efforts a certain amount of subjective colouration will remain. But much contemporary philosophizing seems to me needlessly subjective. For example, the use of the criterion of *inconceivability* to reject an unwelcome or puzzling hypothesis. *Anything* is conceivable; anything, that is, save what is self-contradictory, where one assertion cancels out another and leaves nothing *said*. We do not have to be able to visualize a state of affairs in order to entertain it as a supposition. And the fact that a given thinker's mind refuses to entertain a certain possibility is merely a bit of personal psychology. The only important question is: Is there evidence that the supposition is true or untrue?

Intuition is an equally subjective criterion. Different people have conflicting intuitions; and the belief in intuition really means belief in our own intuitions. These have a convincingness about them which is hard to resist. But it seems clear that intuition is either a rationalizing of instinct or an unanalysed residuum of experience. And either may be misleading. A summary of the results of trusting intuitions would show that while they do sometimes lead to truth they often lead to error. Only the patient use of the empirical method, as worked out by the sciences, can decide which is which.

In science, hypotheses are tested by observing how well they "work," i.e. how well they cover and explain the facts of experience. But in my own time I have seen the word "works" spoiled for serious thinkers by the intrusion of that sentimental

usage which says that a belief "works" when it satisfies, or consoles, or inspires. A multitude of beliefs "work" in this sense, and most of these beliefs are untrue. A belief that "works" is said to be thereby "verified." But what is verified, in the cases to which I refer, is the inspiriting or consoling effect of believing, not the truth of the proposition believed. . . . Even the word "truth" itself is wellnigh ruined. We are told that a belief is "true" for me if it "works" for me, while another belief is true for you. A correct usage would say merely that the one belief *seems* true to me and the other to you. Or that this belief satisfies me and that belief satisfies you. The word "truth" in this "empirical" sense means merely "accepted belief," or "inspiring belief," or "working hypothesis." But to say that a given belief is a "truth" in one of these senses is merely to make a psychological observation, to describe the sort of experience someone is having at the moment, and to confuse us in our search for truth in the historic and legitimate sense of the term.

I understand that for "radical empiricism" this subjective sense of the term "truth" is the only legitimate sense. I have to-day one set of "truth-experiences", to-morrow I may have quite divergent experiences. To-day, for example, it may be "true" for me that you are dead; to-morrow, when I am better informed, it will be true for me that you are alive. . . . But what sort of "truth" was this which belonged to a proposition that declared you dead, when, as a matter of fact, you were alive! It is surely a flimsy sort of "truth"; in fact, it is precisely what a stricter usage calls "error." It did not *become* error at the moment when I learned that you were still alive. The proposition that you were dead was erroneous all the time—as you can testify; even though the supposition that you were dead had for me all the subjective earmarks of truth, and therefore, according to the radical empiricist, *was* true!

Strictly speaking, we can never know, beyond the shadow of doubt, when we have truth. We must content ourselves, when we go beyond the description of our experience of the passing moment, and beyond the dream-worlds of mathematics and logic, with various degrees of probability. But we know what

we *mean* by "truth." We mean, not a particular kind of experience, but a relation between a proposition, or a supposition, and the objects to which it refers. Experience points beyond itself. "Radical empiricism" is an anthropocentric philosophy in a far profounder sense than the Ptolemaic. It is a myopic fixation upon the flux of experience itself; noting, to be sure, its memories, its anticipations, its outward reference, but never discounting its subjective colouration, never penetrating beyond appearance to existence.

III. Epistemology

This brings me to epistemology, which, in spite of considerable current opinion to the contrary, I consider a necessary gateway to any profound understanding of the world in which we live. When in 1911 I published *The Problem of Things in Themselves*, I reckoned myself an epistemological dualist, being impressed by the duality between the cognitive state which is the vehicle of knowledge, and the object known. Since then I have come to see that the neo-realists are right in their contention that *what we are aware of* is, not the cognitive state, but (in perception) outer objects. There is much illusion mingled with our awareness of outer reality; but *in so far as perception is accurate*, the data of our experience are the very physical things that surround us. To recognize this is important; and I therefore now call myself an epistemological monist, though I still emphasize the duality of which I have spoken, and realize that the terms "monist" and "dualist" are too ambiguous to be of any real use.

In 1916 I conceived the idea of a co-operative volume which should formulate a realistic epistemology more accurate (as I thought, and still think) than that presented shortly before in *The New Realism*. Six other American realists—Santayana, Strong, Lovejoy, Pratt, Sellars, and Rogers—joined me in the undertaking; and the volume, *Essays in Critical Realism*, was published, after long and fruitful discussion, in 1920.

We were all convinced realists; that is, we all considered the realistic hypothesis as overwhelmingly probable. *No* existential proposition can be *proved*, for we have no indisputable existential

propositions to use as premises. An existential proposition is to be accepted if it covers the relevant facts of experience and explains them better than any rival hypothesis. This is surely the case with the realistic hypothesis. No scientific theory is, to my mind at least, better evidenced. In my doctor's thesis, in my essay in the co-operative volume, and again in chapter iii of *Mind and its Place in Nature*, I have set forth this evidence, as I see it, and I shall not even summarize it here.

Realism holds that physical things exist in their own right, prior to and independently of our awareness of them. But "neo-realism" had attempted too much. It had attempted to reduce the cognitive relation to two categories, the knower (or organism) and the object known. Critical realism insisted that any cognitive experience may conceivably be hallucinatory; the awareness of physical objects is not, in itself, evidence that such objects *exist*. Hence we need *three* categories to describe the cognitive situation, the knower (or self, or organism), the object of knowledge (which, in the case of knowledge of an existent, has its own independent existence), and the datum of experience, that of which we are aware. In accurate and literal knowledge the datum is identical with the object of knowledge. But whether knowledge *is* accurate and literal is a matter for inquiry in each case. Thus the three categories are always necessary for clear thinking. When they are used there is no difficulty in explaining the fact of *error*—except, of course, the metaphysical difficulty of how an erroneous datum could be "present to consciousness," could be "given." But of that later.

In the Preface to the co-operative volume I alluded to a difference of analysis between two groups within our group. That difference hinged upon the use or avoidance of the term "essence." Santayana had revived the term, and Strong, Rogers, and I adopted it in our analysis of knowledge. An essence is a "describable somewhat," a character or complex of characters; it is, in fact, anything mentionable, without regard to its existence or non-existence. Cognition consists, we said, in taking a certain essence, of which we are aware, as *existent*. Veridical perception consists in having as perceptual datum, and taking as existent,

an essence which does actually exist as the object, or an aspect of the object, to which the body is reacting.

Now this use of the term "essence" seems harmless enough! Its sting lay in the fact that it enabled us to give a clear (and therefore disputable) statement of the status of the data of perception. These data seem so real that the plain man takes them to be necessarily actual components of the existing outer world. The neo-realists had attempted to return to this naïve view, but were blocked by the many difficulties which reflection interposes. Dualistic realists usually call them mental states, failing to distinguish between the essences which do exist *in us*, as our mental life, and the essences *given* in perception (such and such outer objects). It is these latter essences that *confront* us—blue skies and red sunsets, noise and music, dazzling sun and twinkling stars. But these terms all describe essences such as come under the third category of cognition; they are neither mental states nor physical existents, but data of experience. There is a physical atmosphere about our earth, but *it* is not blue; there are vibrating strings and air-waves, but they are not noise or music; there are vast globular masses of matter which we call sun and stars, but the dazzling disc and the twinkling points of light which we see are something quite different. Nor are these essences which confront us mental existents, unless in a strained and misleading use of the terms "mental" and "existence." For they are this or that "physical object out there." They are, in a word, supposititious physical objects, essences of physical aspect to which perception, whether rightly or wrongly, imputes existence.

My own belief is that these supposititious physical things take shape in our imagination through the "projection" of our mental states into the outer world. And I agree with the dualistic realists, that only the mental states and the independently existing physical things *exist*. But perception is largely illusory; the essences which confront us are, to a considerable extent, *not* components of the existent physical world. And because they are the products of "projection" they are not the essences which make up our mental life. What then? Well, they are just essences

and nothing else, just items in our discourse, supposed existents. The status of being "given," being a "datum," is just this status of being imagined or supposed. And what is "given" is not existent at all—except in so far as these "given" essences *do* exist, *did* exist prior to our awareness of them.

The years since 1920 have shown how difficult it is to make a novel analysis of a familiar situation intelligible to thinkers whose minds have run in other grooves. In a number of articles, particularly in the *Philosophical Review* for January 1928 and the *Journal of Philosophy* for October 13, 1927 and March 29, 1928, I have to the best of my ability answered the critics of the doctrine; and I am not so innocent as to suppose that a page or two here will clarify for any one an analysis which, though simple enough, requires, apparently, for every one (as it required, I know, for me) a very considerable mental wrench. I have as yet seen no reason to modify the exposition which I worked out in *Mind and its Place in Nature* in 1924. And I am persuaded that the analysis of cognition presented there, or the closely similar analysis presented in several of Mr. Strong's recent writings, gives the correct solution of the difficult and baffling problem of epistemology.

IV. Metaphysics

The reason why the epistemological solution above outlined has not met with wider acceptance is, I suppose, because it is unintelligible without a backing in metaphysics. How can essences *appear*, *confront* us, be *given*, if they do not *exist*? If we read Santayana we find him distinguishing sharply between the realm of appearance (the essences brought before the mind by "intuition") and the realm of existence. But he fails to tell us how there can be a realm of appearance. How *can* an organism exercise "intuition"—or, as I should say, awareness? It may seem more mysterious that the organism can intuit essences which do not exist; but there is really just as much need of explaining how it can intuit essences which do exist.

It seems to me that to explain awareness we must suppose the

organism to be something more than physical, as that term is commonly understood. It must have such a nature that the givenness of these essences is inevitable under the circumstances. Only, I submit, as we admit the existence of inner events (i.e. states of the organism) of a "psychic" character and a mechanism of "projection," can we explain our attribution to things outside our organism of the sensible qualities which we seem to perceive in them. In "introspection" we are focusing our attention upon this inner life of ours. But even here we are at arm's length, so to speak, from the events which we are introspecting; we cannot note the fine parts of our own inner events, we can cognize them only *en masse*. According to critical realism our data may be to any degree illusory. This I believe to be true of introspective data, as well as of perceptual data. But in both cases the fact that we *have* data, the fact that essences *appear*, requires for its explanation a realistic belief in mental states.

By elaborate arguments I have defended the view that this mental life of an organism is the very substance of what, if it could be perceived from without, would be called its cerebral processes. An identical set of events would in such a case be cognized in two ways; what we should know of it by introspection would be different from what we should know of it by perception, but the two sorts of knowledge, when scrutinized and corrected, would be compatible.

A perceiver would see, for example, grey matter. But the greyness would be illusory as referred to the cerebral process he was watching, as illusory as would be its apparent blueness if he were looking through blue glasses. So on correcting his physical knowledge of the cerebral processes he would finally have to admit that perception, as elaborated by science, could give him only a *structural* knowledge of these processes. Introspection, while misleading through the relative simplicity of its data, gives us a warmer, more intimate knowledge of these events, gives us their *feel*, their "psychic" character.

Now if cerebral processes have a "psychic" character, there are reasons for believing that matter everywhere has such a nature. Organic processes are indeed different from the events

going on elsewhere in the world. But they have developed out of these simpler events. So, I hold, our mental life, the very substance of (some of) these organic events, has flowered out of the universal life, is of the same stuff, and differs only in *form*.

This difference, however, is profound. Consciousness is, precisely, a process of very complicated structure in space-time. I do not see how there could be perception, or memory, or any other conscious process, except as a phase of the life of complex organisms. If so, *consciousness* must not be attributed to anything of which we know except living organisms. By saying that all matter is "psychic" in nature I mean merely that it is of similar substance to that of which our mental life is composed.

This doctrine does not take us far in our knowledge of matter. Yet it is sharply set off from many contemporary views. It is existentially monistic; it postulates no "minds," or "souls," or "egos" of a substance alien to matter. Of course, physical science has not yet reduced its world to one substance; and I have no wish to be monistic in advance of science. But what I mean is that I see no good reason for an existential dualism of the traditional philosophical sort, mind *versus* body as two fundamentally different sorts of existent.

And on my view there is no need to postulate "emergent" evolution. New *forms* are, indeed, continually arising. But just as the various atoms are simply differing structures of protons and electrons, whose mass behaviour is probably the exact resultant of the behaviour of the component protons and electrons, so all existent events seem to me probably resultant from the behaviour of the ultimate units of existence. The conception of a "vital force," or "entelechy," is mysterious. No such entity has been discovered; and the argument that it is necessary to postulate such an entity to account for the behaviour of organisms is a mere argument from ignorance, based upon our present inability to explain their behaviour in detail in terms of their known components and the laws of their behaviour. In view of the extraordinary complexity, the delicate balance, and the ultra-microscopic structure of organic mechanisms, such ignorance

is inevitable. But it creates no presumption against the supposition that there is a purely mechanistic explanation.

Consciousness seems to most thinkers something obviously not resultant from physical processes. But if my pan-psychic doctrine is true, it is a natural and inevitable result, granted such an initial collocation and such laws of behaviour as would produce appropriate combinations of atoms and a favourable environment. For on my monistic view no new substance appears on the scene when consciousness appears, but only more complex mechanisms, capable of receiving impressions from, and reacting to, the world about them in more and more complicated ways.

Mechanisms, I say; and I accept the deterministic implications of the term. But this is not to deny "free will," in the empirical and useful sense of the term. Choosing and willing are facts that certainly take place. We are free, in the sense in which freemen are free and slaves are not; our volitional impulses are causes of subsequent events. The empirical fact is that we are free to do as we will, within limits, if we exert our wills vigorously enough to overcome whatever inner and outer obstacles stand in our way.

There is, to be sure, another sense of the term "free will," in which it means the absence, or partial absence, of causes out of which our volitions grow. Why do some people want to believe in such uncaused volitions? I suppose it is because they like to believe that, whatever their past life, their inherited disposition, and their nurturing environment, they can at any moment, by merely exercising their wills, do what is right. This goes with the traditional notion that acts are rather obviously right or wrong, that right conduct is to be had for the choosing, and wrongdoing is the result of a perverse exercise of the will. A more sophisticated ethics shows us that right conduct is a matter of delicate adjustment to infinitely varying situations, requiring not only the will to do right, but sound instincts, wide sympathies, and keen intelligence. To improve human behaviour is an intricate art, which includes the guiding of inherited tendencies, the counteracting of bad environmental influences, and the bringing to bear of new and appropriate stimuli. Success in this task can only be expected to the degree in which causal relations can be dis-

covered and utilized. That is why all clear-headed educators, social reformers, penologists, and the like, are working on the assumption that determinism is true.

In some cases, to be sure, what is most needful is to rouse the will to exert itself; for the one thing lacking to produce right conduct may be the will to adopt it. So praise, blame, the holding of people "responsible" for their acts, even punishment, at times, and the inciting of remorse, have their uses in determining conduct. But if there is no determinate way of developing a wholesome will, if the will is an untrainable, indeterminate variable, then there is no reason for expecting that the most skilful technique of education can make headway against the capriciousness of this elusive and mysterious entity. It will readily be seen that a philosopher who pins his faith, as I do, upon a future life for man on earth far wiser and happier than any he has yet achieved, must hope that determinism is true. Yet believing as I do that we should not let our hopes influence our beliefs, and realizing that the indeterministic hypothesis, though lacking positive evidence, cannot be disproved, I have to content myself with saying that even if there be a little loose play in the human organism, at least its behaviour can be *very largely* moulded by appropriate influences, and *in so far* man's future may be made better than his past.

V. Ethics

Some people fear that the acceptance of the deterministic hypothesis will lead men to a sense of personal irresponsibility, and so to folly and sin. But if this ever happens it is proof that such men have not learned the *worth* of morality. They would not prefer discordant to melodious music, or unpalatable to delicious food. Neither will they prefer foolish conduct if they have clearly seen its folly. The trouble is, traditional exhortation has led people to divide conduct into delightful behaviour which they really *want* to adopt, and drably righteous behaviour which they feel they *ought* to adopt. Once convince men that morality is simply the best way to live, and that to be virtuous is to be a virtuoso in life—once teach a morality that really *is* the best

way to live, and normal people will espouse it gladly, because they will actually *prefer* it. They will be eager to find means of counteracting the tendencies to folly which they find in themselves; they will be on the side of morality instead of rebelling in their hearts against it.

Moreover, when this sensible attitude toward morality becomes commoner, we shall be able to make headway against the stupidities and superstitions of current moral standards and develop a better code than is yet anywhere generally accepted. We must, of course, go gingerly in these matters, adopting a scientific attitude and distrusting the overemphasis of our immediate desires. But traditional morality is not moral enough. It is haphazard, formalistic, dogmatic, and blind. It sustains manifold injustices, fails to rebuke some of the most callously anti-social forms of conduct, and, on the other hand, too often stifles the free and happy development of personality. We must apply the same open-minded, experimental attitude toward morality that has so strikingly improved the material aspects of our life. We must base our morals solidly upon observation of the results of conduct, and aim consciously to secure the maximum of attainable happiness for mankind.

This view, which I expressed in *Problems of Conduct*, I have applied even more explicitly in my latest volume (1928), *The New Morality*. Perhaps I should apologize for that catchy title; I do not mean, of course, that this conception of morality is original with me, or new in this twentieth century. But it is a conception held as yet by a very small minority; and its acceptance in widespread degree will be a phenomenon of the utmost importance.

There are always those who cannot distinguish between the conception of the general happiness as the *raison d'être* of morality and the preaching of a self-indulgent epicureanism. One of the primary lessons of experience is that pleasure-seeking, when more than incidental, is a poor way to forward the general happiness, and that selfishness is its greatest foe. But these practical decisions have nothing to do with the philosophical conclusion that the justification of moral rules lies in their value in conducing to

human happiness. Certainly we must learn to think not in terms merely of our own little life, or even of the interests of the particular group, or party, or nation to which we happen to belong, but in terms of the welfare of mankind. But if sacrifices are to be made, they must be for a greater good. Any so-called "moral" code that does not make for the greatest attainable happiness is a cruel code, deserving our emphatic repudiation.

I have considerable sympathy with the current tendency to define good and bad in purely biological terms. According to this "behaviouristic" value-philosophy, values are simply "objects of interest"; whatever an organism seeks is *ipso facto* a good. Morality, then, consists in an organization or integration of "interests." . . . This is much better than supernaturalistic or mystical ethics. It is correct in making values relative to the needs and situations of organisms. But, I submit, the mere fact that an organism tends to react in this way or that does not create *value*, any more than the fact that water tends to a lower level makes a waterfall a good. If water *enjoyed* falling, a waterfall *would* be a good. It is the fact that organisms *enjoy* this and *suffer* from that, which brings good and evil into being. If they had no capacity for enjoyment or suffering there would be no point in calling one act *better* than another; we might describe organic tendencies, but it would not *matter* in the least which found expression in action. In their primary sense "good" and "bad" refer to qualities of conscious experience. The moral sense of these terms is derived from this primary denotation.

Objects and acts, then, are not "good" or "bad" because desired, but because, whether or not we happen to desire them or feel the urge toward them, they are, potentially, means for the enhancement or diminution of happiness. It is not a matter of any one's opinion, or approval, or interest, it is a matter of *fact*. There are desires and inner drives, the fulfilment of which would bring only pain. On the other hand, there are acts for which we have no desire, conscious or unconscious, which would bring happiness in their train. We must learn what to *desire*.

It is not true as an empirical fact that a complete integration of interests is always desirable. To some extent acts may remain

miscellaneous; to exclude everything that does not "integrate" may be to lose much of the incidental worth of living. An integration of interests is *better* than a set of miscellaneous and independent interests only in so far as mutual independence brings conflict, and that, in turn, unhappiness. It is a matter for experimental observation to decide when it is best to curb impulses and when we should be tolerant of divergent purposes and diverse forms of happiness.

Certainly youth, and older folk, too, should be flaming and adventurous and gay, when the hard conditions of human life permit. Most people only half live. We should work to secure for men and women rich, varied, interesting experiences, so far as they can have them without hurting themselves or others. We should get out of our stupid individualism, cultivate *Mitfreude*, and count the joys of our fellows as our own. Our religion should concern itself with the technique of happiness—which otherwise people will take so little trouble to learn! It must, indeed, since human nature is so heedless and selfish, be admonitory and repressive. But through and beyond these necessary inhibitions it should keep before men the vision of a more loving and daring, and so more exciting and joyous, human life.

VI. Philosophy of Religion

What, then, is religion? I have expressed my ideas on this important matter in several books, but perhaps most clearly and succinctly in an article on "The Definition of Religion" in the *Journal of Religion* for March 1927. As a matter of fact any definition of religion is arbitrary. No brief formula could cover all the confused and multitudinous phenomena of the historic religions; and our definitions are really formulations of what we consider most important and worth preserving.

Those who define religion in terms of emotional experience, a sense of mystery, of dependence, of gratitude, or of oneness with God, do so doubtless because such a "deepening of the inner life" seems to them of supreme value. And certainly some of these emotions and attitudes are intrinsically worth cultivating.

The mystic's ecstasy is at its best one of the most wonderful of human experiences. . . . But joyous and inspiriting as these emotions may be, they have their dangers. In particular they may cloud our thinking and they may paralyse our activity. Emotional attitudes do for most people take the place of *evidence*; they drug the mind into accepting pleasant beliefs, instead of prodding it to inquire whether or not the beliefs are true. They do for many take the place of a truly religious *life*; they lead to a glossing over of the maladjustments in human life, instead of prodding people into a serious effort to cure them. The satisfaction in a sense of mystery leads to contentment with ignorance. The mystic's rapture leads to an unjustified and inhuman optimism. The sense of dependence leads to a feeling of helplessness and resignation. Instead of this glorification of impotence, or the blindfolded and unsocial optimism of the mystic, man needs to realize his power, through study and effort, to understand and remake his world. We must get away from the lazy and selfish idea that religion exists primarily for personal consolation. There is something more important than that.

Many people think of religion as primarily a matter of beliefs—belief in a supernatural direction of events, in certain alleged historical events (such as the resurrection of Jesus), in the immortality of the soul, or, more vaguely, in the friendliness of the cosmos to man. But as to all this, the unanswerable objection is that religion has no special way of determining whether or not these beliefs are true; that is the task of science, including in that term a scientific history and philosophy. If there is sufficient evidence to convince the impartial mind that any of these infinitely varying beliefs is true, there is no need for religion to give such a belief artificial protection and erect it into a dogma. If there is not sufficient evidence, a Church has no moral right to teach the doctrine as ascertained truth. To do so is to encourage people to be prejudiced, i.e. to prejudge the issue, to answer momentous questions without going through the laborious task of examining the evidence impartially, weighing contrary hypotheses, keeping the judgment suspended, and revising ideas continually in accordance with new discoveries.

There will be many, of course, to argue that religious experience constitutes or contains evidence that certain of these cosmological or historical beliefs are true. These arguments are too numerous to deal with here. I can only record my conclusion that there is nothing to be learned about reality from these experiences, save only as to the laws of psychology. I am not inexperienced in such directions; but I can see no reason for supposing that mystical experiences, or conversion, or faith, have any *noetic* value. There are no discoverable organs by means of which we can get, through these experiences, into contact with a trans-subjective reality. And the hypothesis that we are in such contact explains nothing that cannot be explained in purely psychological terms.

We must be honest enough to say outright that the historical doctrines of traditional Christianity are based upon an historical method long since discarded by trained historians in other fields. And its traditional cosmological doctrines are based either upon loose reasoning or upon premises unwarrantably assumed. Happily, most of these doctrines concern matters of merely theoretic interest. Not that I wish to disparage theory, having spent a large part of my life in theorizing. But theorizing about the universe or the soul is philosophy, and theorizing about a Virgin Birth or Resurrection is historical speculation. Neither is religion. Men believe these doctrines because they have been taught to believe them, because their family and friends believe them, because they cannot bear to give them up. But two things are certain: first, we do not really know any of these doctrines to be true; and secondly, it does not make any fundamental difference in our duties, whether they are true or untrue.

One word in parenthesis. This intellectual honesty does not necessitate a rejection of the belief in God. For there are conceptions of God that necessitate no dubious arguments and no will to believe. Since I am here making a statement of my own beliefs, I will say that in a very real sense I believe in God, both transcendent and immanent. God as transcendent is an essence, the ideal Good, bearing much the same relation to specific goods as philosophy does to the sciences. God as immanent is the Power which is visibly in the world making for righteousness

(as Matthew Arnold said) and all Good. God is the universal self in each of us, our good will and idealism and intelligence which binds us together and drives us on by inner compulsion toward that ideal life for which in our better moments we strive.

What is fundamentally important in religion, however, is not to have a clear and rational conception of God, but to live as brothers one with another. Religion on its best side is a continual rededication of the heart to ideals; it is moral idealism gladly espoused and devotedly wrought into life. The real enemies of religion are not freethinking and "unbelief," but selfishness, laziness, intolerance, divisiveness, callous individualism. In so far as religious emotions, theological beliefs, ceremonies, sacraments and church-going foster a really religious *life*, their usefulness may be gratefully acknowledged. But the worth of a heroic and radiant life depends upon none of these other things. To find the best way to live together is a matter for empirical study, and is not to be deduced from any theological belief. Nor, to adopt it, is it necessary to seek any supernatural help.

We do, however, individually need help. Traditional techniques of conversion and moral inspiration, as used by the churches, are hopelessly intertangled with theological ideas which men are increasingly unable to accept. It is imperative that we learn how to get equally good results, and to get them for a far greater number of people, without imposing upon their minds these often beautiful but ill-founded and inevitably passing beliefs. We need a great religious revival, the preaching of a religion which, without being at odds with our intelligence, will make us so in love with love as the way of life that social injustices will be wiped out and war become impossible. An important task for philosophy is to pave the way for such a religion by clearing the ground of the false ideas of religion which obsess men's minds, and bringing into relief the true function of religion in human society. That function is to lead us to identify ourselves individually with the Great Community of men and women of good will, and by thus lifting us above our personal fortunes and giving us something great and lasting to live for, to keep alive in each of us a sustaining faith and a steady underglow of joy.

This is the philosophy, not of an optimist who believes that all's right with the world, but of a meliorist, who holds that human life can and must be made far happier than it has ever yet, in any lasting way, become for any but a few fortunate souls; the philosophy of one who holds that the way to such a consummation is through a rigorously scientific training in fact and a parallel development of human affections and of religious ardour—in short, through the increase of intelligence and of love.

PRINCIPAL PUBLICATIONS

The Problem of Conduct (Houghton Mifflin & Co., 1914).
The Problem of Religion (Houghton Mifflin & Co., 1916).
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PHILOSOPHICAL LIBERALISM

By C. J. DUCASSE

Born 1881; Professor of Philosophy, Brown University, Providence, R.I.

PHILOSOPHICAL LIBERALISM

STRANGELY enough I reached the age of twenty-four without any suspicion that I harboured a latent interest in philosophy, indeed, without even adequately realizing that such a subject as philosophy existed. My early studies of Latin and Greek in a French *Lycée* would, in the course of time, have made me acquainted with some of the ancient philosophers; but after some years I abandoned the classical curriculum and turned to mathematics and science, with a view to preparing myself for the *École Centrale* and the career of a civil engineer. Illness, however, interrupted these plans and led to their eventual abandonment. I then spent a year in England, and within a few months of my return to France left for Mexico City to enter a business house in a minor position which had been opened to me there through connections.

As I look back upon these early years in France and England, a few things stand out which now seem to me to have been factors of some importance in my intellectual development. I still remember, for instance, the vivid impression of the moment when, in my study of Latin, I first realized in myself an appreciation of sentence structure. I also remember becoming clearly conscious some years later that the mathematical, and in particular the geometrical, modes of thought were to some extent colouring my reasoning processes on other subjects, inclining me to seek order, clearness, and objectivity. Again, I recall that the habit I eventually developed, of beginning every systematic inquiry with the most definite statement possible of the matter in doubt, had its origin in the constant question, "What are we trying to find out?" asked in class by one of my teachers in England, Dr. Cecil Reddie.

After two years in Mexico I came to New York. I had as yet discovered in myself no special interest in any one subject or liking for any one occupation. Only the need of making a living had led me into business offices, and I can well remember how puzzled as to my place in the general scheme of things I felt at times when not engrossed with the novelty of life in surroundings

so different from those in which I had grown up. It was after a year or two in New York that a philosophical book for the first time came into my hands. It was called *The Science of Peace*, and written by a Hindu scholar named Bhagavan Das. The book dealt with the relation of the Individual to the Absolute, and contained a chapter, beyond which I think I did not go, in which the author brought into his discussion the thought of various European philosophers, and in particular of Fichte and Hegel. That I found such a book rather hard to understand goes without saying; but the reading of it at least made me realize the existence and the general nature of the questions that philosophy asks, and revealed to me at the same time the intense interest that such questions had for me. I was then able to perceive in my recollections of earlier years some incidents which, all unheeded at the time, had nevertheless pointed to philosophical leanings. I recall, for instance, something that occurred when, together with other young people preparing to make their first Communion, I was being instructed in the elements of Christian theology by the pastor of the French Protestant Church, to which my parents belonged. He had explained how the freedom of man's will and the omniscience of God were reconciled. When at the next meeting of the class I was called on to recite, I shocked the good man by giving quite a different account of the matter, which I had worked out for myself in the meantime. He spent much effort trying to make me "understand," and I almost as much trying to explain that I understood, but did not agree.

Not long after my discovery of philosophy through the book mentioned, I left New York for the Pacific Coast, and in a few months, finding my dislike of business pursuits growing at the same rate as my preoccupation with philosophical questions, I entered the University of Washington. The years I spent in business offices, where punctuality, diligence, and dependability are exacted of all, were without doubt salutary discipline for a temperament by nature prone to the laziness of an imaginative sort which often goes with artistic inclinations. Such inclinations in myself I trace to a German maternal grandfather, who in his

day attained some success as a painter. To him, perhaps, I owe also a rather strong mystical bent, which somehow manages to thrive in peace side by side with what I may possess of the traits typical rather of the French strain, such as love of explicitness and clear logical articulation. Among other general factors of influence should, I think, also be reckoned the removal from my native environment to Mexico and the United States. The fact that I had to make my living there as I went forced me to adapt myself to the ways and institutions of my new surroundings in a far more thorough fashion than if I had come as a traveller. This has, I believe, tended to develop in me the possibility of sympathetic insight into diverse or even incompatible traditions, philosophic and otherwise, as well as a corresponding measure of freedom from the danger of imprisonment within any single one.

To my first teachers in philosophy and psychology at the University of Washington I am conscious of a heavy debt. Close contact from the outset with the active and keenly critical mind of Professor W. Savery acted, not only as an invaluable general stimulus, but also as a constant incentive to logical watchfulness of my own thoughts and those expressed by others. His merciless dismissal of the pretentious, empty words which so often would pass for philosophical thought, early placed before me the wholesome example of an exacting intellectual standard. My work with Professor H. C. Stevens in the psychological laboratory gave me my first concrete acquaintance with the nature and the practice of scientific method in empirical investigations. I had the privilege of working with him on a problem in which he was at the time interested, and the tireless patience, painstaking care, and scrupulous scientific honesty that characterized his procedure in research constituted a lesson to which I owe much. At Harvard, where I came three years later to study for the doctorate, most of my work was with Professor Royce. His unaffected and kindly but impressive personality, his powerful constructive intellect, the extraordinary range and thoroughness of his learning, and the genius which enabled him to find for even remotely abstract logical considerations the most concrete and living illustrations, all made upon me a profound and lasting impression, the effect

of which, although not easy to analyse in detail, has been far-reaching.

However, among all the contacts, impressions, and experiences of my student days one event stands out above everything else in the effects it has had on my subsequent philosophical development. Up to the time of my coming to Harvard, the train of thought which had affected me most was the idealistic. The philosophy of Berkeley had disclosed to me a novel and fascinating point of view, which I had followed through Hume; Hume had led me to Kant, and from Kant I had come to rest in Schopenhauer, of the essential soundness of whose philosophical system I was thoroughly convinced. Realism had thus up to then made very little impression upon me. On the occasion of my first paper in Professor Perry's seminary at Harvard, however, the actuality and the nature of neo-realism were brought home to me suddenly and in the most living manner possible. On that, to me, memorable occasion I defended my idealistic positions fiercely, and remained unconvinced of any unsoundness in them. On the other hand, I could not at the time clearly perceive the defect which I believed existed in the position of Professor Perry, and I resolved to examine his published articles with care before the next meeting of the seminary. It was a few days after this that the event to which I have alluded above occurred. I was at home quietly reading some book unconnected with the matter when suddenly a most vivid and luminous insight came to me that neither idealism, nor realism, nor any other metaphysical position could, in the very nature of things, be either refuted or proved. Startling as were to me both the content of this insight and the abruptness of its irruption into my consciousness, it proved to be but the beginning of some forty-eight hours of the most extraordinary state of mind I have ever experienced. It was as if the key-log of a jam on some river had suddenly given way. All my previous philosophical ideas seemed to be loosed from their moorings, and to rearrange themselves in new relations together with countless others, unthought of before, that came tumbling in their train. For nearly two days, with hardly any sleep or food, and in a state of the highest

exaltation, I wrote feverishly, yet not fast enough to put down anything more than bare reminders of the seemingly numberless ideas which kept crowding into my consciousness. But alas! these reminders mostly proved quite inadequate to recall the ideas they were meant to fix, when later in soberer mood I returned to them with that purpose. However, the original insight that had precipitated all the rest remained clear and unimpaired at the end, and radically altered my philosophical perspective. If the fundamental position of every ontology is incapable equally of proof or disproof, then it is logically arbitrary, and represents only the taste, whim, or temperament of its upholder. Once this conviction is attained, tolerance becomes the only rationally possible attitude, and a tolerance not of the subjective sort that we may develop towards the mistakes or the ignorance of others, but of the objective kind which is commanded by differences of sheer taste, such as exist, for example, in wines or in foods. The general standpoint is characterized by a conviction of the complete relativity to extra-logical factors, of the very bases of metaphysical systems; and it seems on the whole best labelled by the name which Professor Royce suggested to me at the time—namely, philosophical liberalism. Logically speaking, such a position stands to others in the relation which holds between a propositional function and the several propositions obtainable from it by assigning to its variables their several possible "values." Not in ontology only, but as the following pages will show in every other branch of philosophy also, an analogous, completely relativistic analysis has forced itself upon me, with its unavoidable implication that in each case the "values" which the variables receive depend wholly upon the constitution or the aims of the individual concerned, or, as some might prefer to put it, upon the free expression of the human spirit.

From this account of early experiences, influencing factors, and opinions, I now pass to an outline of the philosophical position to the development of which they seem to me to have contributed in various ways; and in this connection I must acknowledge the great debt which in more recent years I have

come to owe to the appreciation and the encouragement generously given me by Professor Santayana and Professor Lovejoy, and by my mathematical friend, Professor E. T. Bell.

I begin with a brief statement of what I conceive to be the proper subject-matter and method of philosophy. The view often put forward that philosophy differs from the sciences in being more general, seems to me untenable. The scientist acknowledges no limits of generalization or abstraction, at which he would have to stop and call in the philosopher. On the contrary, the scientist goes just as far as he can, and when he stops it is because for the time being he lacks the facts or the insight needed to go farther. These the philosopher cannot supply; his generalizations are not more far-reaching than those of the scientist, but about other things. It is in respect of subject-matter, then, that philosophy does, I believe, essentially differ from natural science. The subject-matter which philosophy alone studies, and which seems to me its only proper subject-matter, is values. In saying this I do not mean that it is the task of the philosopher to apply value-predicates to facts. That is the task of the critic. The task of the philosopher is to supply exact knowledge of the meaning of the value-predicates that criticism must use. We employ constantly a vast number of critical predicates, the meaning of which we cannot be said to understand except in the vague, intuitive way which suffices for habit-covered situations. When such predicates are to serve, not as stimuli to immediate actions or decisions, but as bases for remote deductions, the most explicit and accurate knowledge of their meaning then becomes indispensable. Extemporized analysis does not yield it, and neither do any of the sciences, since they all study objects of quite a different sort. It is philosophy alone which scientifically investigates the meaning and the varieties of possible subjects of application of such predicates of criticism as true, valid, clear, right, good, beautiful, sublime, etc.; and this task involves a good deal more than would appear at first sight. For instance, with regard to the predicate True, it involves not only analysing its meaning accurately, but also analysing the import of such modifiers of it as Necessarily, Certainly, Possibly, Probably.

And it involves also a classification of the logical kinds of entities of which truth can be predicated—that is to say, of propositions, and an accurate account of the import of each kind. This means an analysis of all such fundamental categories as Causation, Teleology, Space, Time, Identity, Substance, and so on. Nothing short of all this constitutes an adequate instrument of epistemic criticism and the fashioning of that instrument, and of corresponding instruments of æsthetic, ethical, and other types of criticism is the task of philosophy.

Philosophy may thus be defined as the general theory of criticism. Man picks his course through life by a process of evaluation which is at first unaware of itself and immediately practical. Criticism—which, of course, does not mean only adverse criticism—is the later stage in man's development, at which the evaluations are conscious and formulated, and therefore no longer necessarily incorporated immediately into life. The possibility of such delay itself makes possible the criticism of criticisms, which is what goes by the name of philosophizing. The final product of the philosophizing process is a philosophy, i.e. a general theory of criticism in all fields. Criticism which is self-conscious and systematic in the sense that it possesses full and clear knowledge of the meaning and implications of its predicates may thus be described as applied philosophy. When, on the contrary, criticism is not equipped with such knowledge, it is blind and haphazard. What can be said of it then, is only that it implies a philosophy and, almost unavoidably, one replete with contradictions.

From this it becomes evident that the task of philosophy and that of criticism are distinct in that it is not the task of philosophy to apply value-predicates to concrete facts, while, on the other hand, there is a realm in which the philosopher, like the scientist, is critic. That realm is the realm of claims to truth, so far as they concern propositions about facts within the field of his own subject-matter. The difference in this regard between the philosopher and the scientist is only that the philosopher is critic of the truth of propositions about truth and other values; whereas the scientist is critic of the truth only of propositions about matters other than truth or other values.

As to the possibility of contact and mutual service between philosophy and science, it seems to me, on the one hand, that their respective subject-matters are completely distinct, and I should therefore fully endorse the assertion of the physicist, Von Laue, that "one of the marks of a correct theory of knowledge is that it is invariant with respect to changes of physical theory" (*Die Relativitätstheorie*, vol. ii, p. 42). On the other hand, one of the things which as a matter of psychological fact is bound to be of great service to the philosopher in constructing a correct theory of knowledge, is acquaintance with the epistemic aspects of the scientific theories through the changes in which his epistemology is itself to remain invariant. The scientist, in his work, uses the various epistemic categories. At times he finds that their application to a novel problem in his field demands some analysis of their essential import. He then improvises so much of an epistemological analysis as the particular case requires. Such analyses, while for the most part very limited in scope, are likely, nevertheless, to be quite sound so far as they go just because they have immediately in view some very definite case; and one test of the soundness of a general epistemology will therefore be its including as special cases the particular analyses which the scientist's immediate needs suggested and certified.

On the other hand, if an epistemology is clear and determinate enough to have discernible bearings on concrete epistemic problems, it may conceivably come to render valuable service to the theoretical scientist by freeing his improvised epistemic tools from accidental limitations, or by proffering to him some tool for which he may be groping. Doing this, however, would not at all be a case of philosophy's adding to the content or to the generality of the propositions of the science concerned. That is something which philosophy, I think, never does.

The view formulated of the general nature and task of philosophy leaves out some problems which philosophers have commonly discussed, for instance, those of the origin and development of matter, life, and mind. But it seems to me that such questions fall completely within the domain of natural science. Only, natural science is not yet far enough advanced to answer them

as it already can others of the same type in geology or paleontology. Certainly the answers which philosophers have proposed to questions of the sort mentioned have never been anything but speculations. They have, it is true, often started from the facts already ascertained by science; but they have quickly left those facts so far behind as to reach a point where even an estimation of relative probabilities is wholly out of the question. Answers of this sort have no claim to the name of knowledge. They represent only the particular suppositions which, among those not clearly forbidden by known facts, happened most to appeal to the temperaments of the persons who made them. They constitute private faiths, stated often in more or less naturalistic language, but hardly more closely related to knowledge properly so-called than are, for instance, the creation myths found in various religions.

The ontological problem, on the contrary, I regard as truly falling within the proper domain of philosophy, because I hold the predicate Real to be a critical, i.e. an evaluative, predicate, and not, as has been generally assumed, a descriptive one. On this rests the ontological liberalism of the sudden advent of which on my psychological horizon I have already said something, and the logical aspects of which will be set forth in the sequel.

If philosophy, in respect of subject-matter, differs radically from the sciences, I believe, on the contrary, that in respect of method it is, or rather should be, like science; for both philosophy and science are attempts to know, and man has so far discovered only one trustworthy road to knowledge in whatever field, the road, namely, called Scientific Method. The general nature of scientific method is well understood, but the manner in which it is to be applied to philosophical inquiries is still in the minds of many a matter of doubt. Obviously philosophy, like science, should start from facts, and test the hypotheses it frames by observing whether or not they fit the facts. But for philosophy, it seems to me that the relevant facts are language-facts, since, according to the conception of it previously indicated, its hypotheses all ultimately concern the meaning of predicates of value or of status in respect of value. The language-facts which are

philosophy's data consist of common phrases where the particular term which happens to be under scrutiny is, not talked about, but used, and used in a manner admittedly correct. All well-educated persons know the meaning of the words of their language, in the sense that they are able both to use them correctly and to understand sentences in which they occur; but not in the sense of being able to give the explicit analysis of their meaning which philosophy seeks. The meaning as intuited in correct usage, however, constitutes the fact which is to be analysed, and which any hypothesis must fit that purports to state what the word considered means. The test of its fitting is whether it can be substituted for the word in any phrase where it occurs, without changing the meaning which the phrase has to language intuition. This is to say that the accounts which philosophers give of the meaning of the various critical predicates must be discoveries, not inventions. For if the philosopher arbitrarily prescribes meanings for terms already in common use, he is then only manufacturing a new language out of old words, not solving any problems. Arbitrary prescription of meaning for an existing word is permissible only within the linguistic penumbra between the characters which the correct usage of the word clearly implies and those which it clearly rules out. Technical terms, of course, are another matter. They are sometimes necessary, and should then be defined accurately; but as Whewell has justly pointed out, even such definitions are seldom wholly arbitrary, for if they are not merely to create idle concepts remaining insulated from all reality, they must be so framed as to make true certain propositions of fact and false certain others in which the word defined is to figure. Towards technical terms in philosophy, however, I must confess to an attitude of great suspicion, traceable perhaps to Professor Royce's admonitions in regard to some early terminological wild oats of my own. It seems to me that too often the use of technical terms has tended only to embalm some philosophical problem. A name given to it comes to pass for the solution, and henceforth easily serves as an abracadabra wherewith to make metaphysical rabbits come out of the cosmic hat. If we asked a stage magician how rabbits can come out of a

hat that contained none, and he should reply that they "emerge," we should be well enough aware that he had but given a name to the fact we wished him to explain. But when the word Emergence is imported into philosophy, it is easy to forget that it explains nothing, and is, on the contrary, the very label which designates a particular sort of ignorance.

The conception now outlined of the proper task of philosophy, and of what scientific method means as applied to that task, indicates the general theme of my philosophical creed. The implications of that theme, in respect to the typical problems of the several branches of philosophy, remain to be exhibited. The ontological problem will be considered first.

Any ontology reduced to its simplest statement is obviously a proposition of the form "To be is to be X," or "To be real is to be X"; but the two forms are not equivalent. Any proposition of the first form, such as "To be is to be perceived," or "To be is to be material," is *a priori* false if taken literally, since what it does is to subsume being-in-general under one of its own species. Such a proposal is obviously as absurd as would be that of stuffing the whole of a building into one only of its rooms, since the name of the other "rooms" of Being must then, in violation of the good usage of those names, either be made to signify some part of one's own room or else be declared so many synonyms for the word Nothing. We may, of course, if we wish, confine ourselves wholly to one room, but we cannot logically force others to do so, nor any more refute their claim that other rooms exist than they can themselves then prove that claim to us.

The absurdity just mentioned, however, is not involved in any ontology stated in the form "To be real is to be X," for such a proposition merely divides the total realm of Being into two sub-classes. One of them, asserted to constitute Reality, is Being which has the character X; and the other, consisting of Being which lacks that character, is said to be Appearance or Unreality. In the case of an ontology so stated the question is only whether in fact it is true or false that to be real is to be X.

To answer this question we must, conformably to the method described above, consider a number of ordinary cases of the

manner in which the word Real is actually used. For instance, it would be said that Spain is a real country, but Utopia is not; that the table-top appears trapezoidal, but is really rectangular, although for the painter it is really trapezoidal; that the table appears solid, but is really a cloud of electrons. Again, one commonly speaks of what one really means, really feels, really imagines, really wants, really is doing; of the realization of one's dreams, and of the possibility of considering dreams as the only realities. In considering such cases of the way in which the word Real is used, it soon, I think, becomes obvious that being real, like being mayor or governor, is a status occupied by something, not a quality discernible in the thing. The same thing is called real by one person and not by another; or by ourselves at one time and not at another. But, unlike being mayor, being real is a status of relation to somebody's valuation, not of relation to other objects.

Of the various hypotheses as to the meaning of the word Real that have been proposed by philosophers, the one which seems to me to have come nearest to fitting the facts is that which asserts "reality" to mean that of which we must take account for our purposes. But it does not quite fit, inasmuch as we are not only purposive, planning, rational beings, but also to some extent the very opposite. To that opposite self of ours, the Real is not, as for our teleological self, the orderly and rational aspect of Being, but on the contrary its chaotic, irrational, unpredictable, novel aspect, since it is that aspect which brings to us the immediate and intrinsic values of adventure, excitement, strong emotion, strange feeling. Properly has it been asked:

> Ist die Vernunft allein getauft?
> Sind die Leidenschaften Heiden?

The word Real cannot, therefore, be defined in terms exclusively of instrumental value. The analysis of its meaning, which seems to me to fit accurately all the facts, is rather this: Real is the predicate applied by any person to anything, to mean that that thing has at the moment value for him, positive or negative, intrinsic or instrumental. This, I believe, is the only meaning of

Real that remains invariant through all changes of attitude or interest, and through all the varieties of objects to which at different times we apply the term. Reality is thus objective in the sense that it is of objects of reference that it is predicable, and subjective in the sense that what it predicates of such objects is their being of a nature which, at the time, has for us value, whether positive or negative, intrinsic or instrumental.

The other views of the nature of reality that have been formulated in the past appear to me to bear to this one something like the relation of species to a genus. They are deducible from it by specifying as supreme some one of the typical interests of which man is capable. That view itself is rooted in a taste for the most inclusive, universal, and objective view-point possible; and that taste is not obligatory on any one else. Obviously, in the very nature of that view, I can have no logical quarrel with the ontological position of another, but only with the logic of his claim to have "proved" that position or "disproved" some other.

In the realm of Epistemology I find myself similarly led to a view for which the only objective constants are relational schemata, with the consequent need for the intervention of a logically arbitrary choice by the individual. The general nature of that view will be indicated by an outline of the answer I would propose to the problem of truth, and then by briefer statements on such problems as that of objective reference, of the internality of relations, and of causation.

The knowledge possessed by man represents facts which were there to be known, but it represents no less interests in man which noticed the facts, or which moved him to search for such as would satisfy these interests. Indeed, so insistent are they that when neither accident nor search brings to man that which would satisfy them, he creates it if he can. A microscope is one instance and the concept of the electron another. Man's knowledge has thus two poles, one objective and the other subjective; and its instruments, as Whewell justly says, are observation and definition. The theory of truth which alone seems to me adequate is determined by such considerations. Needless to say, the word Truth is used here to denote something predicable of propositions,

and not as a synonym of the word Fact, which, so far as I can see, means merely the import of a true proposition.

Every proposition asserted in good faith serves either to answer or to forestall a question. That question in each case assumes some state of affairs not itself regarded as in doubt, but giving rise to a doubt which the question indicates, and which the proposition claims to remove. Thus the question, "Does this piece of ore weigh 1 lb.?" assumes that something is before us, that it is a piece of ore, and that it has weight. The doubt raised is whether that weight is 1 lb.; and the proposition "This piece of ore weighs 1 lb." claims to remove that doubt. When propositions are viewed in this way, Subject and Predicate simply mean *Datum* and *Dubitatum*; and every proposition, whether relational or not, which is asserted in good faith, then declares a similarity or dissimilarity between something defined and something observable—between the characters connoted by one term and the characters concretely present in the thing which is denoted by the other term. In the proposition just considered, for instance, the assertion is that one of the characters observable in the thing denoted by the subject, "This piece of ore," is the same as the character connoted by the predicate, "weighing 1 lb." Had the proposition been existential instead of descriptive, the terms would merely have been inverted. The question would have been, "Is there something weighing 1 lb.?" and the proposition would have been an assertion about the character connoted by the term "weighing 1 lb.," to the effect that it is concretely observable in the piece of ore pointed to. In short, descriptive propositions predicate the "what" of the given "this"; existential propositions, on the contrary, predicate the "this" of the given "what."

Leaving existential propositions out of further account here for the sake of simplicity, it is obvious that the truth or falsity of the proposition, "This piece of ore weighs 1 lb.," depends, among other things, on the meaning of the term 1 lb. That meaning, however, is ultimately assigned to it by verbal definition—that is, it is of the nature of a resolution as to what the word shall be used to mean. Such a resolution is logically arbitrary in the

sense that it is neither true nor false, but merely made. Until it has been made and stated, the proposition containing the term 1 lb. remains completely ambiguous, and therefore neither true nor false. Each person, however, is logically at entire liberty to define his terms as he pleases. Intelligibility depends on their being assigned a definite meaning, not on that meaning being the same as that which they already have in the language spoken by others. Assigning them the latter meaning is only a matter of convenience, since others are seldom willing to go to the trouble of learning a new language merely to have the privilege of understanding us.

But the truth of propositions is dependent in another and less obvious way upon a choice by the individual. Once the character meant by the predicate has been specified, there remains the task of comparing it with the character concretely present in the thing. However, this comparison of a meant character with a concrete character may always be made by a variety of methods. For instance, the comparison of the weight of the piece of ore with the weight defined as 1 lb. might be made by means of the unaided hand, or of the postmaster's scales, or of the chemist's or the jeweller's scales. One of these methods may pronounce the two weights equal, and another not; and therefore, until one particular test of the sameness of the two weights has been specified, the proposition, which asserts them to be "the same," remains ambiguous and is neither true nor false. Moreover—and this is where relativity to the individual again enters—I believe that no one sort of test is intrinsically and *a priori* better than any other, but that the particular sort of test we specify in a given case is wholly a matter of our purposes in that case.

Of course, in the example considered, we have a strong inclination to believe that the use of the most sensitive balance will yield a closer approach to "absolute" truth, but I think this is an illusion. First, it must be noted that a "more sensitive" balance does not mean a more "truthful" balance, but merely one which calls unequal all the weights which another so calls, and in addition many weights which the other, on the contrary, calls equal. But second, the only question to which the use of the most

sensitive balance is essentially relevant is whether the two weights compared are substitutable for *every* purpose. If, however, our question is not this, but only whether the two weights are substitutable for one particular purpose, e.g. that of mailing the piece of ore, and the post-office balance says Yes, then the fact that a more sensitive balance says that they are not substitutable for certain other purposes is completely irrelevant. The use of the more sensitive balance yields, not a truer answer to our question, but merely an answer to an additional question which we did not ask, and at a price in additional time, care, trouble, etc. In other words, the more sensitive balance not only does not more truly answer the question of the substitutability of the two weights for mailing purposes, but it cannot even answer it at all, except in abstraction from other purposes, such as the saving of time and trouble, which in the instance considered also are ours. Lastly, it may be observed that even substitutability for every isolated purpose, does not define equality in abstraction from purpose but in terms of it. To generalize purpose is one thing, and to eliminate it from the definition another.

Our purposes in each case thus determine the sort of test of "sameness" to be used, but they do not in the least determine the outcome of the test, which may be either favourable or unfavourable to them. I should therefore emphatically disagree with any view that would define the truth of a proposition as the expediency, for our purposes, of believing it. The belief, I should insist, is not true because it works; but it works because it is belief in a true proposition, the truth of it being defined as indicated above, in terms of a test (viz., weighing the piece of ore), which is distinct from and antecedent to that constituted by the proposition's capacity to make us succeed in our purpose (of getting the piece of ore transported without cost to the recipient) if we take the proposition as guide to action in the attempt (viz., if we mail the piece of ore with postage for 1 lb.). I therefore do not regard myself as a pragmatist.

There is yet a third extra-logical factor to which the truth of any proposition is relative—namely, the constitution of the

observer who is to make the comparison of the meant character and the concrete character. Even when, as in the instance considered, the sameness or difference of the two is defined in terms of the verdict of some instrument, that verdict itself has to be read by the unaided senses of an observer; and inasmuch as the sense organs of various people sometimes differ enough for them to perceive diversely even very simple matters, the specifying of some particular observer is necessary to make the proposition completely unambiguous.

It seems to me, then, that the truth of any proposition must be defined as the sameness, according to some specified test by some specified observer, of the character which one of the terms of the proposition is specified as connoting, and the concrete character of the entity denoted by the other term. Truth is thus in every case relative to three factors, the specification of each of which is logically arbitrary—that is, their specification is a matter of the individual's taste, pleasure, convenience, or purpose in the particular case. Once the three factors have been specified, however, the truth or falsity of the proposition then is a bare matter of observation and not any further of taste.

Passing now to the problem of objective reference, it would, I believe, commonly be stated in some such form as this: How can a thought entertained by some mind know or refer to an object not itself at that time literally present in that mind? But it seems to me that the mystery which this "self-transcendence" or "objective reference" of thought, as just described, is felt to involve, is gratuitously packed at the outset into the very terms used to formulate the problem. A thought is tacitly assumed to be something which is essentially in a mind, while an object is assumed to be something essentially outside a mind, or at least outside a given mind at a given time. A mind is thus taken as a sort of closed box, with thoughts walled in and objects walled out. More or less unconscious assumptions of this sort, which obviously render the problem insoluble, seem to me traceable to a firm grasping of the Berkeleyan train of thought, coupled with an equally firm clinging to one's natural and more or less naïve realism.

But obviously thoughts and objects cannot, without absurdity, be so conceived as to render impossible the admitted fact of "objective reference," and any such assumptions as the above must therefore be given up. The task which the problem of objective reference then really sets us is that of discovering what exactly and literally we mean when we speak of an "object" and of a "thought"; and it seems to me that here again the answer has to be framed in relational terms. Starting with the notion of Signification (reference, meaning), which I would allow each to define as he may please in psychological, physiological, behaviouristic, or other terms, I should only say that "object" and "thought" are names for certain logical statuses in respect of Signification. More specifically, the status of being object is that of being signified without also signifying—that is, to be object means neither more nor less than to function as terminus *ad quem* of reference or signification; it is simply to be something indicated. To be a thought, on the other hand, is to discharge at the moment the function of at once signifying and being signified, i.e. it is to be an instrument of signification or reference.

I am ready to admit that the correctness of these two hypotheses as to the meaning of the words Object and Thought is far from being intuitively evident. But this does not mean very much. The test of the correctness of a hypothesis concerning the meaning of a word is the possibility of substituting the proposed definition for the word in any phrase where it occurs, without altering the intuited meaning of the phrase. This test, however, presupposes that we have as clear an intuition of the meaning of the proposed definition as we have of the meaning of the word defined; and this is not likely to be the case when the definition, as in the present instance, is framed in highly abstract terms. The only test then remaining is to note whether the definition proposed for the term permits and precludes all the inferences which our intuition of the meaning of the term itself beyond question permits and precludes. I believe that the definitions of Object and Thought which I have proposed satisfies this test.

Even granting this, however, it may still be objected that to deal with the problem of objective reference as I have done is

to give "only" a verbal solution of it. But to my mind this would be like saying that the problem how an uncle can have a nephew is only verbally solved when one has pointed out that being an uncle is a purely relational predicate which means having a nephew; and insisting that a real, as distinguished from a verbal, solution must point to some internal character in the men who are uncles, the presence of which in them explains their avuncularity. In short, the very essence of my contention is that "object" and "thought" are, like the terms "uncle" and "nephew," purely relational terms, which imply nothing whatever about the intrinsic nature of the entities at any time so labelled beyond the capacity to enter into the sort of relation considered. Of what actual traits such a capacity itself consists is a legitimate question; but it is irrelevant to that of the special inferences which can be based on the fact that at a given time a given entity does have the status of "object" or of "thought."

If we accept as premises the view of truth that has been outlined, and that of the nature of objects and thoughts just set forth, such a problem as that of the existence of an "external" world takes on an aspect different from that which it usually presents. An existential proposition remains ambiguous, and therefore neither true nor false as long as one has not specified some particular test of the presence or absence at any point of reference of the characters defining the nature of that which is asserted to exist. An existential proposition, if meaningful, thus merely asserts that if some specified test of their presence were used, those characters would be found present at some place, or at a particular place, within some specified denotational system. The denotational system, or "reference frame," may be a spatio-temporal one; but it may be an order system of some other sort, for instance, the system of the rational integers. I am very far from asserting that, except in special cases, "to exist" means "to be observed"; but I do assert that no existential proposition can be given meaning except in terms of the supposititious observation of the outcome of a theoretically performable test; and that no existential proposition is known to be true except through the actual performance of the test and observa-

tion of its outcome, unless, of course, the truth of the proposition be logically implied by other existential propositions themselves in that way known to be true.

In the light of such considerations, the problem of the "existence of an external world" is seen to be hopelessly ambiguous until one has given some non-figurative definition of what one means by "external," and specified some test of the existence of something "external" that will be theoretically performable in the sense of not requiring that even a hypothetical observer shall observe without observing. If these specifications are furnished, the assertion of the "existence of an external world" then has a meaning; and if the test specified is actually performed, the truth or falsity of the assertion is then known. But I think that if one endeavours to furnish the required specifications one soon becomes conscious that either the question as to the existence of an external world is really absurd or else that the answer to it is so obvious as to be doubted by no one.

A certain opinion on the problem of the internality of relations obviously pervades the epistemological doctrine so far outlined. Most summarily stated that opinion is as follows. An assertion, such as that the nature or the existence of things is independent of their relations, is much too sweeping to be merely accepted or rejected. If, for instance, we have in mind the relation of "likeness" obtaining between two patches of colour, it is obvious that that relation cannot be altered without altering the colour of at least one of the patches. On the other hand, it is also obvious that if what we have in mind is the relation between them of "being ten inches apart," that relation can, under certain conditions, be changed to that of "being eleven inches apart" without altering the colour of the patches. What can be said in general, then, is that some relations are internal to certain aspects of things and others are not—that is, some relations can be altered and leave their terms nevertheless unaltered in some specified respect. Again, some relations cannot be altered without altering their terms in some stated respect. Until the respect and often the degree of alteration considered in the terms is specified, as well as the relation itself, nothing more than this can be said.

Of the various special problems in the field of epistemology, I have studied that of the nature and observability of causal connection more minutely and at greater length than any other. Almost every discussion of this problem that I have read seems to me pervaded throughout by a confusion of the two notions of Cause and Law. The conclusion to which I have found myself led is that the notion of law, or of generality, or of recurrence, is in no way involved in that of cause, but that the causal relation is on the contrary essentially a relation between individual events. To the extent that the individual events involved in a number of causal facts exhibit likenesses, generalization is possible. Generalizations so obtained are causal laws. They are laws because they are propositions about a class of resembling facts; and they are causal because each of these facts individually and in its own right is a causal fact. A given individual event is said to have been the cause of a given other if it was the only change which occurred in the immediate environment of that other immediately before it. This, which Hume calls a "Rule by which to judge of causes and effects," and Mill a "Method of experimental inquiry," is, on the contrary, the very definition of Cause. The observing of that which it specifies is the observing of the causal relation itself, and not at all an instrument for the discovery of something other than what is then observed. When Hume denies that causal connection is observable, what he is really denying is only that causal connection is a third fact between the cause and the effect, of the same sort as themselves—namely, sensuous. However, causal connection is not a sensation but a relation, and according to Hume himself relations are observable. It consists, I hold, of the relation defined above, and the observing of its presence offers no difficulty different from that involved in observing a case of any other sort of only-one-ness. The causal relation, moreover, is not a two- but a three-term relation. It always involves the environment of an object, some change in that environment, and the resulting change in the object. It is therefore impossible to take up the circumstances into the cause, as Mill at one place attempts to do in flagrant contradiction of his own

characterization of the cause as the single difference in the circumstances.

In the field of the philosophy of religion, the question of the legitimate scope of faith in the lives of reflective and informed persons has long seemed to me to have been definitely and conclusively answered by the essential parts of the famous essay which William James unfortunately called "The Will to Believe." Concerning that question, I have therefore only to set forth what I take to be the essential import of this variously interpreted essay. Its peculiar contribution lies, I think, in having called attention to the existence of questions of a certain sort. They are questions which interest us, which have important bearings on our lives, and as to which suspense of judgment is precluded by the fact that we have to act at once on the issues they raise; but they are at the same time questions concerning the answers to which we have no evidence whatever either *pro* or *contra*. Since refusing to decide such a question is automatically to have decided it in a given way, and by hypothesis information on which to decide it is totally lacking, the decision not only may but must be purely a matter of hopes or fears. It is obvious that in believing concerning such a question whatever we please, whatever we already happen to, or whatever we can make ourselves believe, we violate no canon of logic, of evidence, or of intellectual integrity. Anyone who were to call upon us to modify or to give up our belief concerning a question of the type specified would have, to support his call, no more evidence than ourselves of the truth or falsity or probability of the belief, since by hypothesis none whatever is available at the time. The religious or other dogmas about which we legitimately may, if we can, believe whatever pleases us, are thus at the time always wholly outside the realm of proof or evidence, and therefore any endeavour to show even that a belief has some degree of probability automatically admits either that the arguments adduced aré spurious or else that the matter is not one belonging to the legitimate sphere of faith. That is, for religion to argue its dogmas is either futile or suicidal. These considerations appear to me both to warrant and to demand,

concerning such religious dogmas as may constitute instances of the kind specified, an attitude on the part of a rational man of complete liberalism.

In ethics it appears to me that every judgment of Right or Wrong essentially asserts that what is so judged does or does not conform to a standard; and the judgment remains ambiguous so long as that standard has not been specified. No standard that one specifies, however, can itself be said to be right or wrong, high or low, good or bad, since all these terms acquire a meaning only after some standard has been specified. Ethical standards are thus logically arbitrary. The will or the welfare of the majority or of the individual, or of the stronger, or of the weaker, or of the more intelligent, and so on, is a possible standard; and each of these has, in fact, been used as the measure of right and wrong by some persons at some time. But it is meaningless to speak of any one of these possible standards as "the right one," since "right" means only conforming to some adopted standard. To appeal to the testimony of the majority, for instance, or to effects upon their welfare, in order to prove that something is right, is only to pick arbitrarily as standard the judgment or the welfare of a group of people for whom one happens to have regard; and such an appeal proves nothing to anyone who happens not to have such regard. Thoroughgoing selfishness may be proved to a person to be at times inexpedient, but one cannot prove to him that it is wrong, except on the assumption that the misery of others is not to him a matter of indifference. But that it is, or is not, is a bare matter of fact in each case, which no argument can touch. All that can be said is that most of us. in fact, do care to a greater or lesser extent whether others suffer, and care the more, the more concretely present before us is that suffering. But this proves nothing to those, if any, who care not at all.

As regards the meaning of Good, it has always seemed to me that Hedonism alone carries the analysis to its final stage. Whether anything whatever could be called good which brought no sort of pleasure to anybody directly or indirectly now or ever, is a question to which I cannot conceive of any but a negative

answer. On the other hand, if something, whether directly or indirectly, does some time bring pleasure to someone, it seems to me impossible to deny that it is to that extent and in so far good. Perfectionism is confronted by the necessity of specifying which direction of change is to be called progress and which retrogression; and I know of no way of doing this, except ultimately in terms of increase of happiness for somebody at some time. People, however, are not all constituted alike, and what the actual and possible sources of happiness are for each is a matter of bare fact. In this field, too, I thus find myself led to conclude that every critical judgment is ultimately relative to individual verdicts wholly alogical in nature. The problem of the freedom of the will in ethics is, for me, disposed of by the theory of causation outlined, which defines determinism essentially in terms of the individual and not in terms of some "necessity" supposedly external to him.

In æsthetics, analogous trains of thought have led me to similarly relativistic views. Before summarizing them, however, I feel that I must pause to acknowledge the very great debt which I owe to Professor Santayana's writings on the philosophy of art and of beauty. Little as my conclusions in this field may perhaps commend themselves to him, I believe that I might never have reached any at all had it not been for what I learned in the study of many pages on æsthetics from his pen, where an extraordinarily subtle insight time and again comes to expression in the most arresting words. In no other branch of philosophy am I conscious of so great an obligation to the work of a contemporary writer.

One of the central problems of æsthetics is that of the nature of Art. Art, it seems to me, cannot possibly be defined in terms of beauty. The existence of works of art which are ugly, and are yet asserted by their makers to be exactly as they meant them to be, would by itself bar the way to such a definition, even if the direct observation of the state of consciousness out of which works of art are born did not plainly do so. Art, I believe, is the expression of feeling through the creation of an object, when the creative act is critically controlled in the light of the requirement that

the object shall, if æsthetically contemplated, exactly reflect back the expressed feeling to the object's maker, or to others whose constitution may be similar to his. To say that something is a good work of art is only to say that it does just that. On the other hand,to say that an object (whether natural or a product of skill) is beautiful, is to say that when it is æsthetically contemplated the feelings which it yields are pleasant. Æsthetic feelings are any feelings that are obtained through æsthetic contemplation. Æsthetic contemplation itself is most adequately described in brief as a "listening" with our capacity for feeling. Judgments of beauty are objective only in the sense that it is truly of objects, and not of our feelings, that beauty is predicable. They are subjective and relative, however, in the sense that what is predicated of the object when it is called beautiful is its status in respect to the pleasure of the æsthetically contemplative beholder. Judgments of beauty, and so-called canons of beauty, have therefore no binding character at all; and such general acceptance as they may meet signifies only that the original or acquired taste of certain more or less numerous beholders happens to coincide.

Such, then, in the principal branches of philosophy, are the grounds upon which is based the liberalistic creed which I profess. These grounds are not set forth as a proof of its articles, but rather to dispose of arguments which would commonly be supposed to forbid such a creed.

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IN VESTIGIIS VERITATIS

By WALTER G. EVERETT

Born 1860; Head of Department of Philosophy, Brown University, Providence, R.I.

IN VESTIGIIS VERITATIS

WHY are our beliefs what they are? Anyone with whom thinking has been the chief occupation of life must often have reflected upon the forces that determine men's beliefs. These determining factors are obviously not always conscious, nor are the reasons we give for our beliefs always the real reasons for their genesis and development within the mind. Certain dominant influences are clear. They begin in childhood with the steady impact of tradition and habit upon the plastic organism. The pressure exerted by institutions and by social groups is soon effectively in operation. Commitments to a career and to the practical necessities of a livelihood prove hostages to belief as well as to fortune. The rôle of emotion and desire, too, is important. With not a few, beliefs are largely objectified emotions and wishes. As the ancient oracles were inclined to speak according to indications given by the interested consultants, so the result of reflection is often predetermined by desire. No wonder truth wins its way slowly! One might well despair if it were the creature of a day, and had not the long career of the ages.

Even those who are stimulated to self-criticism by the very nature of their task, and who are made aware of all the factors determining our human credos, do not escape altogether the more subtle forms of rationalization. We may be committed by our own theories or our published views. It would be well if a "statute of limitation" applied to all philosophical utterances, so that in five years, or at least in ten, they would automatically "cease and determine," and could be claimed as one's own again only after a thorough re-examination.

One who attempts a review and statement of his philosophical beliefs may well invoke the spirit of candour and disinterestedness, of detachment and objectivity, for the undertaking involves issues which are unaffected by our desires or our inclinations. In practical matters these may well turn the scales. But to fix in advance the price at which we will accept a theory of the world is to erect a barrier against all clear insight. Not in the temper which makes claims or demands can one discern the structure and

meaning of things, or catch the movement and colour of reality. "Jede Absicht der Einsicht droht."

The system that formed the background of my intellectual life and gave me my earliest impulse to reflection was that of the orthodox theology of the nineteenth century before it was touched by the scientific illumination which followed the publication of Darwin's works. I distinctly remember pausing in my play one morning in the 'sixties, when I was a small child, to listen to a talk between my father and another clergyman about a new theory of man's appearance on the planet. What impressed me at the time was that it connected man not merely with the animal kingdom in general, but with one interesting type in particular, that "with tail and pointed ears, arboreal in its habits." Thereafter I often heard and read of the theory, always to its utter confusion. The theological literature which came into the home, and which I seized upon with eagerness, made the theory seem untenable and even absurd.

One intellectual service at least this environment rendered. It gave me familiarity with abstract ideas and encouraged discussion of high themes. I became, in fact, something of an expert in the manipulation of theological ideas, and still recall the commendation with which my exegesis of a difficult text was received by a visiting clergyman, one of the more human of these good men, with whom any lad might feel free to talk. Although I would not willingly subject any child to the acute fears which this theological system caused me at times, I have often wished that all the students whom I teach might have had the benefit of some training which compelled them to raise their minds above the level of the immediately practical and the commonplace. My revolt in youth against the system was not primarily intellectual. It was rather a matter of taste, an instinctive recoil from certain practices that prevailed in religious circles. Especially was the effort of zealous believers to penetrate to the sanctuary of one's most intimate thoughts and aspirations repugnant to me. These I felt were not to be rudely dragged to the light for inspection, or proclaimed from the house-top. Rather were they, like an avowal of love, only to be breathed into a sympathetic

ear in some quiet hour of rare confidence. But despite these infelicities, the old theology remained for many years my philosophy of the world and of human life, for I knew no other. That I accepted it so long without modification argues, I think, a not too suspicious or sceptical nature. It is now a far cry back through the gradual changes of the years to that earlier system of thought. I have not been able to find shelter even in the half-way houses of liberal orthodoxy, where the dwellers have been unwilling, as it has seemed to me, to pay the price of making them permanently habitable.

In the 'eighties a college course in most American institutions did not greatly aid the process of intellectual reconstruction. For two and a half years my time was chiefly occupied with mathematics and the classics, the latter taught as a linguistic discipline with little regard to the civilizations which the languages represented. Only later, through private studies, did I discover the meaning of Greece and Rome. The courses in mental and moral philosophy of the senior year were so limited in method and content that they contributed little to one's knowledge of the history of thought or to an understanding of contemporary movements. Worst of all, perhaps, almost no reading in the subject was required. At the end of the course I had no acquaintance with the works of the great thinkers. The first writers who stimulated me to critical reflection were John Fiske and Matthew Arnold. The latter rendered much the same service at one stage of my development that Emerson had rendered to the young men of an earlier generation. Of science I knew almost nothing. It would have fared ill with my philosophical interests, which had been compelled to work "on an empty stomach," had I not enjoyed the instruction and friendship of a great teacher, one of the greatest that America has produced in his power to capture the interest and arouse the enthusiasm of students for the things of the mind. This man was E. Benjamin Andrews. To him in large measure I owe my career. Although he taught history and economics, philosophy was his central interest. In almost every lecture it broke through the material with which he was immediately dealing, and flashed forth some insight of large or universal significance.

A position as tutor in a private family, held for some time after graduation, gave me needed opportunity for general reading. Some four years later Dr. Andrews, who had just become President of Brown University, asked me to return to the institution as an instructor. Thereafter for several years I combined the teaching of Greek or Latin with the study of philosophy. During this period I translated the *Pyrrhonic Hypotyposes* of Sextus Empiricus. The primary purpose of this was to gain mastery of all the material it contains for the preparation of my thesis on Greek Scepticism.

Germany was still the Mecca of graduate students, and as soon as I had taken the doctorate I spent a year at the Universities of Berlin and Strassburg. In Berlin I pursued courses under Paulsen, Simmel, and Diels, then just succeeding Zeller in Greek philosophy. Work under Windelband in Strassburg greatly influenced my study and teaching of the history of philosophy.

Returning from Germany in 1896 to take the professorship made vacant by the resignation of James Seth, I entered upon the work of teaching without any sense of final commitment in the matter of philosophical creeds. I should, however, doubtless have described my position as that of a critical realist. The system of thought then attracting most attention in America was Royce's idealism. This made its appeal in attempting to offer a logical theory of the necessary form of reality, and in exhibiting the universe as one spiritual life-process. At the same time this system did not too easily compromise with the emotional or practical interests either of individuals or of groups, and it left the character of experience largely for empirical determination, thus assuring freedom to science.

In idealism *c'est le premier pas qui coûte.* This first step consists in somehow reducing the object of thought or experience to the same nature as the process which knows it. All things are experiences of some mind. Nothing is independent of consciousness. If this be admitted, the rest follows of necessity. Obviously objects do not owe their existence, their ontological status, to the experience of finite minds which are occupied with them only in brief spans of time, and often withdraw their attention. In

order to have secure and permanent existence they must therefore be within the compass of an all-embracing knower.

This epistemological argument, which reduces everything to mental processes, left me unconvinced. That mind is the universal and sole knower of the world, that all reality of which we can think or speak, imagine or dream, is by these processes so far brought within the realm of experience, is incontestible. This "ego-centric predicament," to use Professor Perry's phrase, is indeed the A B C of reflection, the first and most obvious fact about human knowledge. But this initial relationship does not determine the predicates applicable to the objects themselves. It only describes the instrument or net with which we, as knowers or experiencers of the world, catch all elements of reality, the most obtrusive and the most elusive alike. And I could not believe that what is thus caught in the universal net of consciousness is necessarily of the same nature as the net in which it is caught. This no more seemed to follow than it follows that, because one catches fish with steel hooks, the fish themselves are therefore made of steel. Indeed, one of the most primary and necessary tasks of knowledge in our world of intercourse is precisely that of distinguishing between objects which are in themselves possessed of consciousness and those which are without it. I also perceived that a change in nomenclature did not effect a change in our practical contacts with reality. Experiences of value remained what they were before. In an idealistic universe, mire and dirt were no less potent to soil; rotting flesh and swarming maggots lost none of their repulsiveness. I was thus driven back to a realistic position.

I have asked myself whether my early experiences partly predetermined my choice of realism. As a lad I had roamed the fields and forests with a freedom enjoyed by few. I dealt vigorously with the external world, manipulating its objects to my own ends with no doubt of their non-mental character. They were clearly marked off from the animal kingdom which I knew and loved, and in which I recognized varying types of consciousness. I observed and made acquaintance with the farmers—those unwitting realists of the soil—who wrested a simple livelihood from their cross-grained farms. They would unhesitatingly have

rejected the idea, had I been able to propose it, that the infinite variety of their world could be significantly described by a predicate derived from the mere fact that they were having a conscious experience of it. Were these early habits of mind an influence in placing me among the "tough" rather than the "tender-minded" philosophers? I cannot say. Certainly they fostered no visionary attitude. I have to confess that even to-day most metaphysical idealisms seem to me to have caught some fantasy of a dream-hour, which, loath to surrender, they have attempted to imprison in the chains of an ingenious logic.

Pragmatism did not greatly influence me. On the one hand, the truth it contained seemed already current in all sound thinking, while, on the other, it was peculiarly liable to misapprehension and misuse. It was doubtless possible to state the chief principle of the doctrine in such a way as to offer little ground for criticism. The fruitful working of ideas might be found in their satisfaction of all the intellectual tests that in any given case could be applied; the factors of sentiment and immediate satisfaction of felt needs, other than the need for truth, might exercise no influence in determining the value of evidence. But those outside of philosophical circles who at once seized upon it were tempted to make it the justification for believing whatever might be immediately useful, pleasant, or comforting to believe, without regard to other evidence.

The lack of scientific training in my college education left lacunæ of which I was keenly aware. With wider reading I soon discovered a strong interest in certain sciences, especially biology and medicine. The development of medicine from early Greek times to the present day proved for me one of the most fascinating and instructive chapters in the history of science. Biology I found was busy with questions that had direct application to ethics, and also extended to wider issues in philosophy. These influences, and others to be noted in due course, turned my thought to a series of problems both scientific and philosophical in their significance.

For one thing, I grew increasingly distrustful of the commonly accepted dichotomy of mind and matter. The terms in which

the second member of the dichotomy is often described—"mere matter," "dead matter," or "blind force"—make it a pauper by definition, and rob it of any possibility of fruitfulness in the process of evolution. The abstract concepts of mind and matter are then applied to reality, with the result that a sharp disjunction, an either-or with the alternatives, "either dead matter or perfect mind, either blind force or a planning, creative consciousness akin to our own," must be the principle of explanation to be applied to the world. But opposites which are valid for certain phases of our experience—light and darkness, summer and winter, and the like—cannot be applied in the same sense to reality. Nature in its unceasing movement transcends and annuls them; else we might be permanently caught in the one or the other, fixed, perchance, in a prison-house of darkness or congealed by frost. Nature contains both opposites, but is contained by neither.

The hypothesis that primitive organic forms arose from the inorganic has, I have long believed, a clear right of way as against any other view. The difficulty of conceiving a different origin of life is well-nigh insuperable. Whence and how the seeds of life could be injected into matter from without, baffles the imagination, and finds no analogue in any known process of nature. Wherever these processes are open to observation they are self-contained, subject only to the influence of environment. The idea which has been suggested by some, that life floated in upon the earth from without, if there were any grounds for its acceptance, would at most show that exceedingly low forms of life existed elsewhere. The *a priori* dictum that life can only come from life is as idle as other such dicta with regard to the possible and impossible. What is possible in this realm can only be determined by the event. Reality is its sole measure and determinant. It may be that scientists, even by the most skilful manipulation, will not succeed in producing life in the laboratory. But Nature's laboratory is far ampler and better equipped. She has time—thousands of millions of years—and can make endless trials under conditions which man can never reproduce. The same considerations apply to the appearance of consciousness. The dogma that only like can produce like would in the last analysis compel one to accept a

Platonic museum of forms and prototypes as antedating and conditioning the generation of all the species of life known to us. Aristotle's criticism of the Platonic ideas as having an existence apart from concrete reality would apply, and we should have the same doubling of the forms to be explained. All novelty would be excluded. Yet novelty is one of the most obvious facts in nature. Genuine novelties are produced even in the inorganic realm. The chemist builds up synthetic compounds that have never existed before. In living beings the novelties which attract attention do not occur *uno saltu*. They represent exceedingly long-continued minimal emergences which even the trained scientist can only imperfectly detect and describe.

My attention to the mind-body problem has been stimulated by many years of service as trustee of a mental hospital. This position has involved the duty of frequent visits to every ward. What was at first undertaken as an obligation has become a matter of absorbing interest as well as of spontaneous solicitude for the inmates. Visits to other hospitals in this country and in Europe have enabled me to see practically every form of mental disease and defect, from the commonest types of manic-depressive insanity and dementia precox, to such cases of physical malformation as are illustrated by a group of children, with almost bird-like heads, segregated in the Salpêtrière in Paris. Like all who have ever reflected upon the problem, I long ago recognized that we have no knowledge of minds of any kind save in the most intimate union with bodies, and that it is impossible to form any conception of a mind sundered from this union. No effort of the imagination can picture a disembodied spirit. Even those which mediums introduce to favoured circles are clothed in some tenuous or wraith-like material. One is tempted to suggest that the triviality of their utterances may be due to the unsubstantiality of their organic structure. But in mental hospitals the unity of mind and body leaps to the eye with striking distinctness. It is also true that the drives and impulsions of human nature are revealed in the various psychoses with a clearness nowhere else exhibited. The old dualism made possible the idea that the insane were people whose minds had somehow gone wrong, but whose bodily organs

and functions remained quite unimpaired. Even when this appears superficially to be the case, we are amply justified in believing that a physical correlate of the mental malady exists. The greatly increased attention now given to the physical examination and diagnosis of mental patients often reveals some hitherto unsuspected disease or functional disturbance. Man, I firmly believe, is a thinking, feeling, and willing organism whose complex structure is one thing, not two. There would be no objection to such phrases as thinking and feeling bodies or spiritual animals on the one hand, to corporeal minds or incarnate spirits on the other, were it not for the fact that these modes of expression imply a priority of one element and its subsequent union with the other. We can indeed abstract from this unitary organism and can make either mind or body an object of thought. In this sense, and in this only, are they two things. But this abstraction for purposes of thought no more proves the duality of the self than does the fact that we similarly abstract the qualities of the rose—its colour and its perfume—prove that the rose itself is two things and not one. We may then say: No organism, no mind; different types of organism, different types of mind; to each individual organism, an individual mind. And, as far as our present knowledge goes, in order to establish the existence anywhere of a mind or minds akin to our own, we should have to prove the existence of organisms that are akin. The old anthropomorphic—or better, perhaps, anthropopsychic—beliefs which still persist so tenaciously found their support in a dualism that assumed the capacity of minds to function independently of organisms. But not one authentic example of this has ever been brought to light.

The interpretation of the self indicated above, does not, I conceive, involve any slight or peril to its higher and more characteristic powers. These are activities of the organism as truly as are the lower and more animal functions. Indeed, just these are the meaning and value of the human organism. And its environment, it must be remembered, is enormously extended in comparison with that of lower organisms. Not only does it range nature with a vastly lengthened tether and with acuter perception, but includes in its span wide areas of cultural-historical

life, and emergent social structures of increasing complexity and determining influence. The capacity for rational and moral judgments cannot, I think, be explained as a mechanism which operates without regard to logical and ethical situations—that is, an environment in which the true and the good are conditioning factors in the life of the organism as real as are food and drink.

I was indebted to an early study of Schopenhauer for his clear and forceful statement of the doctrine of the grades of being. Quite apart from any consideration of the validity of his own metaphysics, it at once seemed to me an important but neglected principle. Certainly no other classical philosopher has dealt with it so fruitfully. Many years before one heard of emergent evolution or creative synthesis, it affected my attitude to the problem of development, and also to that of naturalism. I distrusted the systems that, by the magic of a single formula, sought to transcend the real and vital differences that reality presents, whether this formula was an abstraction from the highest or the lowest grade; whether, as in idealism, it magnanimously offered to exalt everything to the rank of mind, or, as in materialism, it invidiously threatened to degrade everything to the level of inorganic stuff. Further, as I believed in the genetic continuity of nature's processes and did not believe in miracles, I insisted that there was a naturalistic view which would do justice to all the higher grades of being, whereas the naturalism then current was, in the eyes of its critics and perhaps in those of its chief advocates, able to function intelligibly only when well coated with dirt and slime. I therefore avowed my belief in what, for lack of a better term, I called in the class room a larger or higher naturalism. Questions as to nature or the natural admit of no answer whatever that is meaningful until the sphere to which they apply is defined. Then the differentia which mark off the chosen sphere from others must determine the account to be given. If at one level this account must be in purely physical terms, at others it must include all that is essential and characteristic of what has been won in the process of development. Such an account of human life will find the intellectual and moral, the æsthetic and religious experiences as "natural" as the movement of

physical bodies, the growth of plants, or the instinctive activities of animals. To man it is natural even to fly. It has long been a native impulse to "take the wings of the morning," and the means to the realization of this cherished dream have been invented as the result of scientific curiosity inherent in man's mind. So, too, courage and heroism, sympathy and unselfishness become in choice spirits the expression of their deepest cravings; and all the works of grace in all the saints are in as true a sense "natural" as the evil deeds of the criminal.

Philosophy is not in a position to determine the details of fact or explanation of the evolutionary process. Here it must be the humble pupil of science. It is equally clear, however, that the descriptive accounts of science yield no account of values. To be sure, the scientist is also a man of human passions and interests, and from this human point of view he cannot be debarred from indicating the losses and disasters, the gains and triumphs which he discovers. In the old theology, creation was the signal display of supernatural power. As evolution has gradually displaced the earlier picture of the sudden advent of terrestrial life, there has been an effort to make the new view an equally obedient and useful *ancilla theologiæ*. But those who best know the details of evolution might well hesitate to give unqualified approval to the new servant. A commission of experts would, I am confident, approve the earlier plan of Adam's decorous entrance upon the stage in the full possession of human traits. Even the birth of Eve, the pains attendant upon which were assuaged by the happy device of twilight sleep, commends itself to one's impartial judgment as a small price for the male to pay for an unsophisticated but enterprising companion who would permanently relieve him of the travail incident to the perpetuation of the race. The appearance of animals by creative fiat would have been admirable on general grounds, and would have had the advantage that a discriminating taste might have refused passports into life to certain undesirable types which the democratic procedure of evolution has freely admitted. By contrast, the processes of evolution, judged strictly as methods of intelligence and foresight, make a rather sorry showing. In the words of a distin-

guished biologist: "The whole multimillennial course of evolution, with its innumerable *impasses* and *culs de sac*, its abject and tragic failures, would seem rather to be one vast monument to their colossal and hesitating inadequacy, blindness, and stupidity."[1] Popular encomiums of evolution, on the contrary, fix attention only on certain selected features or results.

My thought was early focused on the problem of value as the central problem of philosophy. The first literature on the subject that came to my attention was that of the Austrian school. I used the term in teaching for many years before the writing of *Moral Values*, but attempted no formal statement of my ideas until the preparation of a paper for the meeting of the American Philosophical Association in 1906.[2] In ethics the concept had the obvious advantage of relating the subject in a significant and fruitful way to other fields of value which furnish the very material with which the moral life is compelled to work. The method I had hit upon and developed seemed to succeed in making students feel that the subject was vital, in fact was of the very essence of their own life-purpose. Despite frequent reports of diminishing interest in ethics in American universities, I still believe that, for teaching purposes, it is a truly great academic discipline.

I shall not attempt any recapitulation of the points of my ethical theory. It will be sufficient for the present purpose to say that the central thesis I have tried to maintain is that the content of morality is a content of various specific interests or values primarily not designated as moral. Hence my table of human values. The moral task *par excellence* is the criticism and organization of these values in the structure of individual and social life. Ethics thus becomes in its wider scope a critical study of civilization. The intimate connection of ethics with the other fields of value necessitated a fresh interpretation of the relationship existing between the various humanistic sciences. On this problem

[1] W. M. Wheeler, *Proceedings of the Sixth International Congress of Philosophy*, p. 91.

[2] An abstract of this paper appeared in the *Journal of Philosophy*, January 31, 1907. This attracted the attention of Fouillée in France. See his *Morale des Idées-Forces*, Introduction, p. xlvi.

I searched in vain for a satisfactory statement. The defects of the common departmental view which divided the sphere of experience between them, much after the method of settlers staking out land claims, were evident. But a satisfactory theory that gave to each of these sciences its complete freedom without conflict with any other, I could nowhere find. Although the topic occupies but a few pages of the Introduction to *Moral Values*, I still think it to be one of the best theoretical insights of the book. It was in the way here outlined that I was able to gain fruitful insight into such complex relations as those of ethics and economics, of ethics and æsthetics, and of morality and religion.

One challenging question concerning the foundation or the metaphysic of morals solicits attention. Reality has brought man upon the terrestrial stage, has determined his environment, has given him his equipment for life, and nursed him through the long ages of infancy. Does it also promise continuous direction of his career? Does the cosmos indicate the plan and the method of his future development? Or has it produced in man a unique creation for which there are no models elsewhere, no patterns for his guidance? And if this be the true alternative, must he count the gifts of intelligence and appreciation which work within him as his sole legacy for the accomplishment of his purposes and the realization of his ideals? It would doubtless be comforting could we be assured that the universe deals with men according to strict standards of value, that a clear principle of worth determines everywhere the incidence of birth and death together with all the down-sittings and up-risings of earthly fortune. We could then be assured that unworthy types that may come into being will be thrust down to speedy extinction, and that all who flourish do so because of intrinsic excellence.

But the statement of this hypothesis meets the refutation of hard experience. The cosmic struggle for survival has too often been what Huxley called it, "the gladiatorial theory of existence." The destructive processes of nature give no hint of discriminative selection. One individual is taken and another left without regard to their moral and spiritual worth. It would fare ill with our ideals of sympathy, of justice, and love, were we to rest their

validity for human life upon the evidence of their operation in the cosmos. Only in man, and to a slight degree in the animal world, is there evidence that these sentiments come into play. The devastating hurricane is not malicious, nor is the favouring breeze an expression of good will. The micro-organisms that kill by the millions do not hate their victims, nor do the beneficent ones love those to whom they bring relief.

The evidence which we can at present command compels the belief that man's life on this planet is a unique phenomenon in the universe, and that he will in vain consult the stars or the heavens above to chart his course. If he thinks to find patterns there for what should be here, he sees only the visions which his own thought and imagination have created. Our race is thrown back upon what it can discover through its own nature and its own needs. If reality conveys to man any message, it would seem to be just this call to self-direction and even to struggle against such forces in the cosmos as oppose his ideals. He must renounce the ruthless methods of nature in order that he may be himself. This does not mean, however, that we can disregard nature. We are directly dependent upon it, and we may even detect here and there principles in its operations that we can utilize. In particular, the rigorous destruction of the unfit, which keeps the averages of animal species at so high a level, suggests that if standards of human excellence, intellectual, moral, and social, are to be maintained and advanced, some attention must be given to the selective process. Civilization unquestionably offers a degree of protection to all its members, even to the lowest and least valuable types. And if the mean shelter these find is not too poor to prevent rapid multiplication, which has rarely if ever been the case, civilization is attempting an emergence above lower forms in contradiction to the principle which governed its origin. Submergence rather than emergence would appear to be in prospect. But when methods for the accomplishment of the desired end are to be considered, then we must sharply repudiate nature's ways and find those consistent with the dictates of humanity. Wisdom must find marriage with love.

The ultimate principles applicable to morality, then, I hold to

be those discoverable in the life of man, and in nature as far as it is presented to observation and study. These are the parts of reality open to our direct examination. Of the totality of things, our knowledge is too limited to yield any truths that can shed light upon the specific problems of the moral order. The universe, as far as we are able to glimpse its structure, exhibits a measure of order and regularity and at the same time an infinite variety of detail. Uniqueness of the individual parts is one of its most striking features. Could thought penetrate the entire scheme of things, it by no means follows that we should then be in possession of knowledge that would make at all clearer the path humanity should pursue in development of its own life and destiny.

Philosophy is, in the final reckoning, a way of life. Thought roams far afield, but there is always a home-coming, when account must be taken of the human significance of the journey. The applications of philosophy to life then gain their rightful hearing. My interest in the theoretical problems of ethics had been keen, but once these had found the best statement I could give, my attention was drawn increasingly to the actual moral order exhibited in social life and institutions. Here was a challenging situation. Large areas of human activity seemed almost untouched by ethical ideals. They presented a standing contradiction of generally accepted moral standards—in short, were unmoralized. Some of these unmoralized activities had been commonly considered as outside of the moral province, as matters over which man does not exercise control. And where it was recognized that they are within the sphere of possible control, and are of high importance for human welfare, the very magnitude and complexity of the issues discouraged courageous thought and action. Among such issues to which I every year devote attention in the class room are militarism, population, poverty, and, far more fundamental to these than is commonly assumed, the problems of sex.

What degree of progress in general may we reasonably hope for humanity? On this question neither an easy-going optimism nor a dark pessimism seems warranted by what we know of the past. Every genuine advance will, we may be sure, bring some new and difficult problem in its train. But before the twilight of man's

long day on this planet, be it a thousand million years or less, it seems reasonable to anticipate an advance to higher levels of effort. This in itself is no insignificant gain. The plane at which mankind fights its unceasing battle determines the values realized. It makes a vast difference whether the struggles of an individual or of a people are for mere subsistence or for the durable values of life to which the means of living should minister.[1]

I turn again afresh to the problem of value, but approach it from a different angle and with other questions in mind. Shall values be regarded as objective, ready-made, as it were, and awaiting man's act of appropriation, or as existing only when the act of appropriation and appreciation is present? This much debated question may be regarded, in part at least, as one of terms and definitions. It might be agreed, for example, to use value for the objective things and conditions which are essential to the experience of value. The common use of language lends a measure of support to such usage. This is especially true in the case of economic values. In the language of the market-place, things possess value. The same holds true of æsthetic objects generally, although we are here perhaps more keenly aware how largely value depends upon what the conscious subject brings to the act of æsthetic perception. However, it is clear that without conscious subjects there would be no value at all. The presence of such a subject is always presupposed. Even the most hardened trader of the mart knows how speedily his values will diminish or disappear, once attention or desire is withdrawn. I prefer, therefore, with many others to regard value as involving its actual experience. In this way justice can be done to both the subjective and objective factors. Certainly there need be no disparagement of the objective conditions of value, nor to their authority in the determination of such values as the true and the good, which no desire or caprice of the individual subject can change.

[1] A fuller discussion of the subject is given in my address, "The Problem of Progress," as President of the Eastern Division of the American Philosophical Association, before a joint meeting of the Eastern and Western Divisions in New York City, December 1922. See the *Philosophical Review*, March 1923.

Between positive value, the good, and reality we cannot establish an equation. Reality is positive being, never non-being, whereas negative value or evil is as real as positive value. To parts of reality we necessarily apply the terms of a negative valuation. Theodicies have struggled in vain to escape this conclusion or to soften its consequences. Evil cannot be construed as the mere privation of good, or simply as good in the making. As an experience it is the polar opposite of good. The agonized sufferer who prays for extinction knows well that what he suffers is not mere loss of the accustomed joys or satisfactions of existence. The suggestion would appear to him or to an onlooker as a cruel mockery. What I have said of other opposites of experience, however, applies here also. The opposition we experience does not bind reality in fixed and changeless states. It passes from good to evil and from evil to good; out of evil may spring some good, and out of good, some evil.

The sharp differentiation of the point of view of a science of value from that of the physical sciences is obvious. Descriptive judgments of science never yield value judgments. They are concerned with the relations existing between the elements of reality, such as the connections of time and space, the cause of change, and the resemblance of forms. Despite this inherent limitation of science, a misinterpretation is not uncommon. Because science finds in the world a certain type of intelligibility or rationality—that is, structures susceptible of understanding and formulation in so-called laws—it is concluded that reality is rational in the sense of conforming to or satisfying human ideals of value. But this is an application of the idea of scientific rationality or intelligibility to quite another sphere. Discovered and established in the connections and interrelations of things and events, it is now applied uncritically to the sphere of values. The two spheres are not the same, nor is the vindication of the principle in the one a vindication of it in the other. To science a destructive storm, an epidemic of disease, or an earthquake is as intelligible or rational as is a day of exquisite beauty, a community enjoying health, or a countryside smiling with its rich harvests. Good and evil are equally intelligible. But, from the

point of view of human values, evil is irrational, a negation, something to be resisted, because destructive of precisely what we seek by human effort to create and preserve.

To the problem of evil, I am therefore compelled to give a degree of importance which it does not commonly receive. I accept the tragic view of life, in the sense that its inevitable struggle and conflict involve at times disaster and irreparable loss.

"Tout est dangereux ici-bas," said Voltaire. And, long before, the father of tragedy had declared:

> No mortal thro' this life shall go
> For ever portionless of woe.
> Alas! Alas!
> It comes to all, or swift or slow.

Experience has never been able to gainsay this truth. Any philosophy that disregards it, seems to me to lack penetration or to have sought refuge in a defence mechanism. I am constantly astounded at the facile way in which optimistic systems, whether of philosophy or of theology, attempt to dispose of this fundamental dualism. If there are any true standards of value, if men really care for the things they profess to count precious—care not only for themselves but also for their fellows—then to accept the view that whatever is, is good, that "all's well with the world," seems to me no less than a repudiation of avowed standards and a stultification of intelligence. Frankly, one would like to believe otherwise. But if experience teaches anything, it teaches that we are all compelled to believe a thousand things that we would gladly have different from what they are. The old theology was here true to the facts. Granted all its presuppositions, it was strictly logical in its thinking. A personal devil was as necessary to the explanation of the actual world as was a personal deity. Without desiring to rehabilitate a discarded *persona dramatis*, one may rightly insist that, robbed of this rôle, the drama loses all verisimilitude. This repudiation of a frank recognition of evil was a change far more momentous for theology than it is commonly accounted. It marked a decline in intellectual rigour, the loss of a firm hold on reality, an ominous trifling with grave issues.

The procedure which selects from the world only the good elements, and out of this material alone constructs a scheme of things entire, celebrates an empty triumph, for its creation corresponds with no world of our experience. Perfection of the universe is sometimes affirmed on the ground that compensation will be made to each individual sufferer. This belief draws cheques in its favour on the unknown to the point of credulity. To be satisfactory, it must extend its system of rebates to all individuals of the brute creation. It must also show that such evils as moral and spiritual degradation are all ultimately good. When perfection is located, not in the experience of finite beings, but in an absolute experience which utilizes the evils of finite life for its own enrichment, our most dispassionate judgment registers a protest. One thinks of the issue so pithily stated by James, when he pictures the hypothesis of millions of beings kept permanently happy "on the one simple condition that a certain lost soul on the far-off edge of things should lead a life of lonely torture." With James one must add, "How hideous a thing would be its enjoyment when deliberately accepted as the fruit of such a bargain." A master of the show who desired to have real tragedies enacted for his delectation would not be an object of religious veneration.

The tragic view of life, in the sense stated, is not pessimism. Life may still amply justify itself, still be worth the burning of the candle. The idea that the universe must be either perfectly beneficent to man or completely hostile and fiendish, finds not the slightest support either in logic or in experience; not in logic, because it ignores the endless series of possibilities between these extremes; and not in experience, because our surest judgment concerning the actual order of things is its varied and opposing value-content. Good in parts, in parts it is evil.

Can we distinguish between evils that ought and evils that ought not to be? Dare we say that some should not be eliminated from human experience, whereas others ought, nay, must, be rooted out? Such a distinction we are compelled, I think, to make. No reflective mind would perhaps deliberately affirm that physical death on this planet ought to cease and our mortality

at once put on immortality, even though such a thing were possible. The change would result in a starving population or in checking the fresh stream of life. In this case the world would soon present the unlovely spectacle of a senile or stagnant race. Similarly, all risk, hazard, and danger, which inevitably bring evil, could not be excluded without changing the whole structure of nature and of human life. On the other hand, such evils as gross ignorance and superstition, injustice and cruelty, certain types of disease and suffering, prostitution, and war, could be diminished and even destroyed with only those readjustments that humanity could profitably make. No fundamental reconstruction of the world order would be involved. Against evils of this kind we feel bound to wage uncompromising warfare.

And, finally, what of religion? How fares now this dominant force of my childhood and youth? Does it still survive under a changed form? Certainly I have never escaped its influence. For decades scarcely a day has passed without serious reflection on some aspect of the problem. I have observed with care the manifestations of religion in all kinds of people under all sorts of conditions, and I have attempted to put every possible question to the religious experience of the race. A gradual process of reconstruction such as has taken place in my life of thought and emotion allows time for readjustment. However radical the changes effected in this way, the spirit was never left homeless. The view I am to sketch will doubtless seem to not a few to rob life of its supports and its consolations. "I could not live with such beliefs," would be their first impulsive cry. They fail, however, to reckon with man's capacity for readjustment or with his tenacious hold on the living world.

> For an enduring heart have the gods given to the children of men.

The undying element in religion—to deal summarily with so great a theme—is found in man's relation to the universe. And, as a totality of things, a whole of reality, is involved in the object of religious thought, so its subjective aim is a wholeness of life. What is demanded in religion, then, is both a settling of one's

intellectual account with reality, as far as this is possible, and the winning of a practical and emotional attitude that is vital and pervasive, an enhancement of the values of inner experience. It early became clear to me that a religious belief or faith must satisfy the same criteria of reasonableness as our beliefs or faiths in other spheres. Certain significant features of the matter I find recorded in notes made long ago: (1) Faith must be founded upon knowledge; (2) although a projection of thought beyond knowledge, it must be consistent with what we know; (3) faith lacks the certainty of knowledge, otherwise it would cease to be faith; (4) all beliefs or faiths must be held subject to correction by the discovery of new knowledge; (5) in certain practical spheres faith is an essential condition of the realization and validity of its object, whereas the general structure of reality is independent of our desires and our wills.

With the passing of all anthropomorphic elements in my belief it was evident that every specific idea and form of speech in traditional theology was a creation of the poetic imagination, a religious symbolism. But I found significance in this as a medium for the expression of aspirations and emotions when no prose could utter the full meaning of the heart. To many it is perhaps a necessity, a healing experience, a genuine catharsis. Especially is this true in sorrow or tragedy when our impotence is made manifest, and scarcely less in the great consummations of life when we are conscious of enjoying some bounty of the universe beyond our own creating. But the full fruition of symbolism is only attained when we know that it is symbolism, and are able with complete freedom to surrender ourselves to its sway without the intrusion of the intellectual demand for truth. The critical tests of historical, scientific, and philosophical veracity no longer find place; the letter would indeed kill. Had we to submit the great hymns of the church to such examination, scarcely a line could be consistently sung. But here we move freely in the realm of poetry, where all peddling exactitude is forgotten. Lange, in his chief work, somewhere asks: "Who shall convict Raphael's Madonna of error, or who shall refute a mass of Palæstrina?" Who indeed? Their truth lies only in their fitness to express

emotions and ideals, not in any conformity to external reality. Symbolism, of course, may go quite mad, and by its elaboration of complex and intricate forms be in need of so much explanation and justification that it again enters the intellectual arena, where it is unfitted to contend.

But a positive content of reality as we immediately know it has gradually shaped itself *sub specie universi*. If tragic, as I have insisted, the world is also marvellous, fascinating, rich in possibilities. Every part of nature offers its processes and its myriad forms for interested study and contemplation. Every species of plant and animal life is a field for observation and experiment. Even a single species is capable of engaging for a lifetime the mind that once enters upon the discovery of its secrets. So have men found delight in the understanding of things unseen by the eye of the ordinary observer. These are the contributions of science to religion. What science can never give, because it moves in a different sphere, is a vindication, or even aid toward vindication, of traditional theology.

But it is the unfolding of the drama of human existence that most of all fills the mind and feeds the imagination. If the development of a single character in biography or in drama and romance can prove of absorbing interest, what must be said of the inexhaustible possibilities offered by the unceasing stream of human life? The gifts of genius that enrich all subsequent ages, the heroic spirits who win a forward step for the race by high endeavour, the kindly souls who make daily life more gracious—all these glorify the humble ways of earth in which we walk. To possess as far as possible the values of this our real world, and to seek to extend them to others—this, in the language of religion, is to live to the glory of God. All these values have the character of a gift or largess which no design or effort of individuals could provide. Little by little these things have become for me alike the glory of the universe and the glory of man. Religion thus lives in every ray of sunshine, in every gleam of beauty, and in every warm pulse of human love. These things, too, are happily beyond the shadows of doubt, and safe from the devouring teeth of criticism.

The affinities with historical thought of the view I have briefly suggested will be clear to all students. In common with mysticism, both classical and Christian, it holds the inapplicability to ultimate reality of all the specific predicates drawn from finite being. In consequence, it agrees with mysticism in affirming the symbolic character of current religious thought and language. And it further emphasizes the contemplative appreciation of nature and of human life that mysticism at its best has always cultivated. It differs with mysticism, however, in its estimate of the significance of those states of emotion or ecstasy to which the mystics have looked for an illumination of reality that is denied the intellect. These states, I hold, exhibit certain capacities of the subject, and may at times enhance inner experience without extending knowledge of the object of religion. At their worst they tend to illusion, to imaginative flights that have lost relation with reality. If I were to choose a single phrase to characterize my thought, it would be the *amor dei intellectualis* of Spinoza. It is *amor* because it is a warm and joyous appreciation; it is *amor intellectualis* because it is not the love of human affection, but demands a quickened perception and understanding; and it is *amor dei* because all its objects are referred to the being and substance of reality, or to nature in Spinoza's meaning of the term.

In Christianity I have never ceased to find a principle of permanent value. It matters not that it was no new discovery in the spiritual history of the race. Indeed, its wide extension is evidence of its universal appeal. But the founder of Christianity captured the idea anew for Western civilization, and announced it with fresh insight and power. If one turns from this ideal of love and universal brotherhood to the Christian cosmology, the basis of its theological system, quite a different judgment must be rendered. This cosmology represents a view of the world that has long ceased to exist save as a tradition specially guarded from the stream of thought. As to a divine order, a kingdom of righteousness and love, of which the religious spirit has dreamed, this, if it is to exist at all, must be an emergence of future development. It can be realized only through the devotion and service

of those who ardently care for its coming. To rest in the assurance of its present existence, save in embryo, I regard as an illusion that often endangers its establishment. Christianity is not a completed achievement. It is rather a challenge, a task, and also a test of the spirit of man.

It would be an intolerable presumption for anyone to assume an escape from all the presuppositions, prejudices, and errors that beset the work of the philosopher. How difficult this work is, and how incomplete, he of all men is most keenly aware. It involves not merely logical thinking, but also a clear perception of facts and a just appraisal of their relative significance. No dialectical subtlety can make amends for failure in these latter details. The best one can do is to give to his fellows with perfect frankness and clarity the total impression which the world has made upon him, in the hope that other hands will correct and enlarge the picture. The same reflection applies to the corporate thinking of any age or generation. Our own time has been a period of rapid discovery and illumination. But it is still a question how much we have won. Some errors we have surely escaped; into others we have doubtless fallen. Here, too, we must hope that, in Xenophanes's phrase, men "will gradually find out what is better."

The future, like other dimensions of the unknown, is hidden from us. But the philosopher is the friend of the unknown. He eagerly desires to make its acquaintance. Nor does he condition his introduction to it by stipulating what its character must be. If, when his lamp which lights so narrow a circle, and that but dimly, is threatened with extinction, there should be for him, beyond all expectation and prescience, some great surprise of illumination, he would gladly bid it welcome and advance to probe the secrets it revealed.

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THE IMPERSONAL POINT OF VIEW AND THE PERSONAL

By WARNER FITE

Born 1867; Stuart Professor of Ethics, Princeton University.

THE IMPERSONAL POINT OF VIEW AND THE PERSONAL

IN the first chapter of his *Experience and Nature* Professor Dewey attempts a task in which (as he himself has best shown) all others have failed; in which he also fails; and in which, as I think, he was bound to fail. Under the title of "Experience and Philosophic Method," what he undertakes to do is to lay a solid foundation for philosophy—to define a philosophical starting-point, or, in common terms, to establish a basis of fact—which shall be once for all independent of personal presuppositions, interpretations, prejudices. In this Professor Dewey is faithful to the academic tradition, which looks for truth and reality in the impersonal. Your true academicist is careful to confine himself to the third person or to the impersonal "It is so." "It is so" rather than "I think so," because the use of the "I" implies an immodest intrusion of his unworthy self into a realm divinely impersonal. His feeling is that his personal motives and prejudices should have no bearing whatever upon what he is to call real.

My own feeling is just the opposite. When I write "I think so," I feel that for what I say I am claiming no more authority than that of my sinful and erring self; and that I am warning my reader to take it only for what it is worth. If I should write "It is so," I could not but feel that I were speaking with the voice of God —since only God can properly say "It is so." And so far am I from supposing that the personal prejudices of philosophers have no bearing upon truth that I think I should better know the truth—I should know better what they see—if they were less careful to conceal their prejudices from their readers, but no less from themselves, out of deference to academic respectability; if they would tell me what they see, and not what belongs to "the logic of their position," or to the part they have chosen to play. The task is not easy, *crede experto*. But a mind without prejudice—it may be a *tabula rasa*, a mirror, a cinematograph, a phonograph, or any of those other contrivances which psychologists substitute for mind, but it will see nothing.

Hence my *Credo* will be a statement of prejudice; or, if you

please, a presentation of the ideas which I find congenial, which I like to entertain, towards which I feel hospitable. I will not say that these ideas form a harmonious social circle. There may even be those among them which have not yet been introduced to one another. And that they should form a system, God forbid! But if this seems to any reader an incredulous *Credo*, or perhaps only an impudent scepticism, let me suggest that in the end he may find it all too credulous. It is always possible that scepticism is but another name for faith—and conversely. Your man of science is neither credulous nor sceptical; he simply records facts.

For in speaking here of "ideas" I am adopting a convention of the learned. In my opinion there are no such entities as "ideas." By entertaining ideas I do not mean that I am collecting pictures: I mean, rather, that I am grasping, or at least glimpsing, aspects of reality; and a "mere idea," which grasps no reality, I regard as a mere word or phrase. And if this seems to imply a universe of loosely indefinite reality, generously revealing itself in various forms to the many varieties of ideas, as the God, or the divine, of William James reveals himself to the varieties of religious experience—well, yes, this implication may as well be admitted. The only alternative that I can discover is some sort of absolute—absolute mind, absolute matter, absolute God, or absolute event—which sooner or later turns all ideas into nonsense.

After an honest attempt I have not succeeded in stating my *Credo* in the form of an "intellectual autobiography," as called for by the idea of these essays. I cannot disentangle an intellectual autobiography from an autobiography rather intimately personal and somewhat uncertain in my own mind. As for the "individualism" which is to be found in all that I have printed for many years past, I cannot remember when I was not an individualist or when I was not confronted with the inconvenience of being one. But it occurs to me that for the ideas about knowledge which appear in this essay I can find a definite starting-point in the reading, more than twenty years ago, of Royce's lecture on "Physical and Social Reality" in the second series of

The World and the Individual. And this leads me to offer a few details which may serve as a setting.

I was born in Philadelphia in 1867, graduated from Haverford College (A.B.) in 1889, and received the degree of Ph.D. from the University of Pennsylvania in 1894. My interest in philosophy was definitely initiated by reading Martineau's *Types of Ethical Theory* in my last year at Haverford; it was restored some fifteen years later, after I had been ready to abandon philosophy for anything else, by reading Royce. Meanwhile, I had studied three years with Fullerton at Pennsylvania, during the first of which I was also a student at the Philadelphia (Episcopal) Divinity School. I had also spent two years (1891–93) in Germany, hearing among others Paulsen, Ebbinghaus, Dilthey, Lasson, Von Gizycki, Simmel, and Stumpf. I say "hearing" advisedly—I seem to have heard Beethoven and Wagner to more effect. Fullerton was really my only teacher of philosophy, and to him I owe a vigorous training in dialectics, perhaps the absorbing interest in the nature of knowing which has never left me, and I do not know how much more. I rewarded his efforts some years later by a sharply critical review of *The World We Live In*; and it is now a great pleasure to recall the warm-hearted, even affectionate, letter that I received from him in reply to mine deploring the fact that I could not review the book otherwise.

But among those to whom I owe much I should name Professor Dewey, who has kept my imagination busy with an ever-developing "situation" for years past. To the graduate student seeking a subject for a thesis, my standing recommendation (unfortunately not thus far accepted) is a study of the philosophy of Professor Dewey, not, indeed, as a method of sharpening his teeth, but as the best way of realizing in present terms the ramifications and implications of philosophical problems. But whether from wrong-headedness or what not, I seem to have been nobody's disciple. More shocking, then, will be the confession that more than anywhere else have I found what is personally congenial and suggestive in the disorderly philosophy scattered through the essays, novels, and poems of Miguel de Unamuno, who calls

himself a *paradojista*, or paradoxist. His *paradojismo*, to the effect, as I take it, that the real is the paradoxical (paradoxical, of course, from the standpoint of logical and scientific analysis), I am disposed to elevate into a metaphysical principle, belonging to the conception of reality as personal. For in the world of persons all the real beings are paradoxical; and the only strictly rational beings are such things as typewriters and gasolene engines.

My circle of prejudices may then be roughly summarized by saying that for me only persons are real and only persons are significant. All impersonal things, including the objects presented by science, are abstractions, constructions, fancies. These abstractions I take to be ways of talking about the world and of dealing with it which serve as highly useful and even indispensable instruments of communication; but they are never quite adequate; and they never stand for more than "so to speak," "as it were," or "as if."

But to state that persons are real, as if each of us had arrived at finality, is to state the case too plumply—which of us can boast of more than of trying to be a person? It will be better, then, to state the prejudice as a preference for the personal point of view. And here I refer to the age-long antithesis between soul and body, between the inner life and the outer fact, between subjective and objective. What is the meaning of "subjective" and "objective" in terms of human experience? For me the meaning is this: taking any human activity or situation, what is the difference between being the agent (or patient) of the situation and the observer of it? What is the difference between running from a bear and seeing another run from a bear; between being ill and visiting the sick; between being a parent, actively responsible for the welfare of one's children, and giving to parents neighbourly advice; between being a child reading a story, and writing stories for children; between being a dog and owning a dog (or between being a pig and having a taste for pork); between being a professor and figuring as a professor; between living in the past and noting (another's) memory behaviour; or, finally,

between being in love and watching a pair of lovers (all the difference, it seems, between tragedy and comedy)?

The difference of point of view I describe as the difference between personal experience and impersonal observation—or between experience and observation. Impersonal experience I regard as denatured experience; personal observation is something more than observation. The difference is also a difference between an inside view of a situation and an outside view—for me a difference between reality and appearance. Personal experience, inner reality, impersonal observation, outer appearance —for me in each of these expressions the adjective serves only to bring out the meaning of the noun. The connections of noun and adjective will then serve to mark my metaphysical prejudice and to show what I mean by a preference for the personal point of view. The realities of human life I find revealed in the inside view: in some such inside view I look for the realities of the universe.

Latter-day realism makes light of the distinction between subjective and objective. Realism graduating into behaviourism cancels the distinction. There is a story of a drunken man who was advised by a waggish friend to take the first of two cabs standing at the door of his club, because the second cab "wasn't there." Realists, offering similar advice, explain that the second cab is labelled "consciousness," or the inner life. For myself, then, this distinction, this conflict between inner and outer, is not only real; it is the tragic conflict which alone gives meaning to life, and which alone gives birth to philosophy. If the distinction were effectively cancelled I wonder what philosophers (including realists and behaviourists) would have to talk about? If all were impersonally objective, science would suffice; there would be no questions peculiarly "philosophical."

Accordingly, when I say that only persons are real and only persons are significant, I mean that for me the person marks the *type and direction* of what is real. The only conceivable thing-in-itself is a person. The typical experience of reality is one person's experience of another person. Truth is a personal experience—there is no impersonal truth. Beauty is the expres-

sion of a personal impression—there is no impersonal beauty. Morality (and this was the thesis of my *Moral Philosophy*) covers all of the personal life—and there is no impersonal morality.

In the philosophical directory I suppose that this point of view would be called "personalism," or "personal idealism." For myself, I prefer not to name it. Only let it not be called "subjectivism"; for me it is realism.

To make clear the implications of my metaphysical prejudice (let me call it now my point of view) I need a background of contrast in a point of view resolutely "objective." This I find presented very significantly in Professor Dewey's *Experience and Nature*. And very significantly for me, because, in the endeavour to make the vocabulary of philosophy intelligible to myself, I find that I am obliged to refer each of its seemingly abstract terms to what Mr. Dewey calls a "social situation"; and in reading Mr. Dewey I seem to have found the peculiar social situations corresponding respectively to "subjective" and "objective."

The various "subjective" prejudices to which I subscribe I find conveniently summarized by Mr. Dewey under "the genteel tradition." Now, "the genteel tradition," which is an inheritance from Plato and Aristotle, represents that form of social order, conceived by both of them to be divinely ordained, in which there is a sharp distinction and separation between a lower class of labourers and artisans, who do all the work, and an upper class of hereditary aristocrats who tell them what to do, live upon the fruits of their labour, and are thus enabled to spend their own lives in the enjoyment of contemplation. In such an order of society there is a clear separation between knowing and doing; and since the knowing is the special privilege of a favoured and ruling class it comes to be invested with an "honorific" significance. All idealistic metaphysics, of whatever kind, is a projection upon reality of this class-tradition. To this desire of creating an "honorific," and therefore invidious, distinction, Mr. Dewey attributes all of those ideas, logical, ethical, æsthetic, metaphysical, or religious, which form a part of the traditional

"higher culture," but more especially those that lay emphasis upon "the inner life," or the life of thought; or upon intimately personal experience as the realization of value and the revelation of reality; or upon the peculiar sacredness and binding power of personal and intimate relations.

The genteel tradition—*versus*—— How shall we name the tradition represented by Professor Dewey? I shall call it the tradition of the man on the street. And this not as an epithet (all of us are many times men on the street), but as a description of the "social situation" and point of view that explain the meaning of "objective." It might be described as the point of view of the market place or of the agora; in Southern Europe of the café; not of the club, because a club is exclusive. In general, it is the point of view of "the public." [1]

The genteel tradition represents, correspondingly, the point of view of private life. The phrase suggests, indeed, an aristocratic class-distinction, but as we study its implications as developed by Mr. Dewey we see that any common labourer resenting gossip about his wife, any slave claiming his soul as his own, any person whatever attaching importance to his consciousness of self, would be representing the genteel tradition. To incur this reproach it is not necessary to say, "I am better than thou," but only, "I am different from thou—I am myself." "The genteel tradition" covers all differences to which personal importance is attached—that is, all individual differences which are conceived as other than socially "functional."

This means that Mr. Dewey shares the "social" point of view which has dominated all of our thinking for a generation or more past: the view which describes all of the realities of human life as "social" and attributes to "individualism" all that is false and vicious. Here, therefore, I pause to ask whether "social" is the right word to use. It is true that "society" and "social" have come to be little more than algebraic signs, *de*noting the group as against the individual, the larger group as against the smaller, and *con*noting little or nothing. Yet there remains

[1] When this was written I had not heard of *The Public and its Problems*, Mr. Dewey's last book, which I have not yet read.

a moral implication, namely, that there is more fellowship ("social" being derived from *socius*, a fellow or companion), more sympathy, more humanity, in the numerically larger relations than in the smaller. It seems to be forgotten that while "social" marks a distinction from "individual," it marks also a distinction from "political," and that the commonest use of the term outside of philosophy and sociology is to distinguish social relations from business relations. These considerations seem to me to reverse the moral implication, and to remind us that relations are more properly and intensively social to the extent that they are personal. There is more of human sympathy and fellowship within the family or the group of intimate personal friends than there is among the members of a club; more within the club than among the men on the street. Among the stockholders of a railway company, a "social institution" *par excellence*, there is practically none.

Hence I suggest that Mr. Dewey's "social" point of view would be better described as the point of view of "the public." What I have in mind is two familiar "situations," standing for a familiar difference of point of view: the home situation and the street situation; the point of view of "the private citizen," in the privacy of his home, of his circle of friends, or of his meditations, and the point of view of "the public." The public view is the objective view.

It is commonly assumed that the point of view of primitive man is purely and completely objective. The primitive man is untroubled by any consciousness of self; he seems happily free from the corrupting influence of private life. It seems that Mr. Dewey prefers to take his illustrations from primitive life, explaining the meaning of art, for example, by reference to the (public) ceremonial dance. Primitive life offers a conspicuous illustration of social solidarity. Yet I think it will be more instructive to describe it as the point of view of classical antiquity. Though deprecating the genteel tradition, Mr. Dewey has much to say about the Greeks; and his attention is fixed upon the fact (very significant for an analysis of the objective motive) that it was the Greeks who introduced the scientific point of view.

Now, what first strikes the eye in looking at Greek life is that it was peculiarly and exclusively public life. What we know of Athenian civilization leaves us with the impression that it was a civilization made up entirely of men on the street—or in the agora or market-place. Of course we know that Socrates sometimes went home to sleep, and therefore that private life existed as a sort of brute fact. But it is a fact of which the corresponding point of view is seemingly unrepresented in Greek literature—as it is clearly *not* unrepresented in English literature. And all of the Greek political philosophy is for the purpose of assuring us that, whatever be the status of private life as a brute fact, no one can be conceived really to live, to have the right to life, or to be treated as a living being, except as he functions as a member of recognized standing in the city-state. The Greek city-state and the objective point of view—the connection is surely not without significance.

In any case, it seems that for Mr. Dewey, as for the Greeks, all that is good in life—and all that is real life—is public life. For him the ideal human community may be conceived to be, not perhaps a life without distinctions, but at any rate one great stream of life, in which there may be for brief distances lateral canals (in which is performed some kind of "readjusting" function which I do not understand), flowing from the main stream and into it again, but no quiet pools. A stagnant pool—this is his conception of the subjective and personal; no one really lives except in the current. To change the figure, we may note the difference between the newer style of village or suburban town in the United States and the older style of forty or so years ago, or the style of an English rural community to-day. In the newer style fences, walls, hedges, which mark off one's private ground and protect it from the eyes of the public—all these have vanished. This protection was part of the genteel tradition; it is now seen to be hostile to public spirit. The good citizen is he who treats his carefully tended gardens as a part of the public domain, and leaves them unscreened for public enjoyment. The implication is that his soul, as belonging to the same domain, should be similarly unscreened.

But for me the interesting point in all of this is not the social aspect, but the metaphysical. Every "social situation" has its metaphysical implications. And in Mr. Dewey's philosophy, as in every other, it seems that the good and the real, the moral and the true, are bound in the end to come to the same thing, as against the evil and the unreal, the immoral and the false, which also come to the same thing. Thus it comes about that the subjective, or private, point of view is not only morally false, it is illusory from the point of view of reality. The real world is one continuous and homogeneous world, objective and public. Man, as Mr. Dewey tells us again and again, is continuous with nature. He is not marked off by any "inner life," or "consciousness," from the rest of the organic world. The "inner life," in short, is a fiction. Just as Society is one unbroken stream of life, so also is Nature. And as Society is a public affair, to be viewed from the street, so again is Nature; to be viewed from "out there," and not from "in here"—"in here" being nowhere. Or, in terms of "experience," there is one unbroken stream of experience. It is irrelevant to ask, Whose experience? Private experience, experience regarded as in any way peculiar to you or to me, is an illusion and an impertinence. "Personality," it almost seems, is an insult to Nature. All real experience is public experience. The only real world is what Fullerton called "everybody's world."

And this is a way of saying that the "objective" motive of Mr. Dewey's philosophy is the motive underlying modern empirical science. The modern scientist's "appeal to experience," as he terms it, is an appeal to public experience—namely, to what anyone who is in possession of his senses may be expected to see. He may refer you to "expert observers," but in his view they are "trained observers"—made and not born. No "scientific authority" claims for himself, in theory at least, the powers of a prophet or a genius. It is no inner revelation to which he appeals, but only, in the end, to what anyone will see who looks carefully. Has the use of antitoxine lowered the death-rate in diphtheria? To any sufficiently industrious investigator the facts speak for themselves. They are public and need only to be pointed to.

And this gives us in one word Dewey's own conception of experience. The philosophic method, or method of getting at experience, is, he tells us, the *denotative* method, or the method of *pointing*.

By the same token "religious experience"—and I should say that all æsthetic experience lies in this direction—must be excluded from the world of experience. Such experience partakes of the nature of a private revelation and implies a personal capacity to receive. Even of æsthetic impressions it may be said that, to whatever degree communicable, each is in the last analysis a uniquely personal impression. In any case it seems that neither religious experiences nor æsthetic impressions are to be verified by simple denotation. The communication of them, so far as they are communicable, depends upon sympathetic insight. But if the measure of experience is denotative—what you can point to—this will mean that religious and æsthetic experience, so far as it is private, is neither experience of reality nor, in the end, real experience. All real experience is public experience.

Returning, then, to my own prejudices (which being unscientific cannot be stated so neatly), I come to my moral prejudices, the first of which is that all moral questions are resolvable into the question, What is it to live? As I have just suggested, it is a conception of what constitutes life that underlies all of any man's philosophy. But I do not ask, What is life? but, What is it to live? If you, my reader, could elect to live abundantly, what would that be? For Mr. Dewey, as I understand him, it would be to share the communal, public life of something like the Greek city-state.

For myself, it is towards the private life that I look for what it is to live. To me "the only deeply satisfying things are the personal intimacies. All of the casual 'social' goods are of value only as they retain the flavour of the personal (which, curiously, they always make a pretence of doing). And all of the ostensibly impersonal interests, such as an interest in books, in scientific investigation, in social reform and commercial enterprise—which, it seems, are necessary to give breadth and substance to

life—these again take on the quality of life just so far as they furnish the subject-matter of intimate intercourse. . . . And it seems to me that he who in this human sense is at home in the world, who in the circle of family and kin finds an ever-satisfying affection and understanding, and in his friends an intelligence ever responsive to his tastes, has the best that life has to offer; and that he who lacks these lacks everything."

This I repeat from my *Moral Philosophy* (pp. 285–86). But lest the picture of life seems too "otiose" (Mr. Dewey's word), let me say that not more than the next man can I conceive myself to live without something to do which is worth the doing. Yet I refuse to identify life with "work." I might not improperly say that for me life is leisure. But by "leisure" I should then mean, not the absence of action, effort, struggle, but the presence of thought. It is this that converts work into life. For myself it seems that any task, however difficult or exhausting, or however mean, becomes interesting and the living of life, when I can do it from the point of view of leisure, putting my thought into it and guiding it by my thought. This for me is the experience of "activity"; to be distinguished from work without thought, dictated by the economy of thought, which is "business efficiency."

The gospel of work, the gospel of efficiency, the gospel of success—all of these stand for views of life from the "public" point of view. The same is true of the conception of life as a "career" (or possibly as a "mission") which is so often presented as something idealistic and edifying. To speak of one's life as a career is to think of human life as a dramatic spectacle in which each of us plays his part. This histrionic conception of life is to be found in widespread currency and in forms hardly to be suspected. For Professor Hocking an important function of human life is the making of "history"; and this involves the making of war. One need not deny that history makes interesting reading, but to *be* a character in history, a figure in a pageant, a part in a play—this, if we pause to think of it, is to find ourselves in the position of poor Augusto Pérez in Unamuno's novel, *Niebla*, when Augusto discovers that he is only a character in a novel which Unamuno has written for others to read.

Yet from my point of view to live is indeed to be self-centred —I should insist upon that. To be self-centred, however, need not imply an attitude either of self-contentment or of exclusiveness. For me, I might say, there is no life without love—we live by communion with our fellows; and he who loves can never be self-contained. And the more that I can make my own the experience of life of my fellows, the richer my own life will be. There may be persons who find satisfaction in "drawing a line," who pride themselves upon the persons whom they do *not* know and the things they do *not* understand; but that seems to me very stupid. I find, however, that sooner or later something like a line, not located necessarily here or there, is drawn for me (as for other persons) by the fact of fatigue. Up to a certain point in a conversation, in an enterprise, in anything you please, I can mean what I say and mean what I do; beyond that point I begin to be oppressed by the sense of playing a part. This creates for me an issue between "public" and "private"—a moral issue, in the presence of which I do not hesitate to prefer "the genteel tradition."

Let me explain, however, what the genteel tradition means for me. In his *Realm of Mind* Professor Woodbridge describes the mind as a phonograph. Mind, he tells us, is translation; and the phonograph "translates" the surface of a disc into sound. Professor Woodbridge has doubtless observed that we are a nation of phonographs, engaged very conspicuously in translating the advertising pages of the newspapers into purchases profitable for the advertisers. I fancy that every self-observant person knows what it is to be a phonograph. For myself, when I have been teaching two hours and then, without intermission, go on talking for a third hour, I know precisely how a phonograph must feel. And so, if I must stand for a genteel tradition, let it be this: I do not wish to be a phonograph, I cannot conceive this to be the ideal of life of my fellow-men.

This is not to pass judgment upon those who are interested in public life, or upon those who are engaged in business. Leaving politics aside, I do believe, with Plato (and with many a business man), that trade is essentially demoralizing, i.e. de-moralizing;

and trade rather than industry. The fact that trade is necessary need not alter the statement. But while I consent to live, indirectly, on the profits of trade, I cannot very well say that my soul is above it. And I might find many a form of business interesting if I could treat it—not indeed as a game, but—as a scientific problem, soberly utilitarian. My quarrel is with those who find in business and politics the essence of religion and brotherly love. Chief among these are the orthodox political philosophers who, accepting the inspiration of Plato and Aristotle, and the Greek city-state as a revelation of the will of God, find in the state, or in "society"—in the life of the "public"—both the organic unity and the source of all the moral life. To my view the nearer you get to the state the farther you have left morality behind; and (with the preamble to our Constitution) I prefer to regard the state as simply a necessary and useful institution for the transaction of our common business—which may involve much or little, from the building of prisons to the building of railroads, or the building of churches, as determined by circumstances and by the personnel of the citizens. The unity typified by Greek city-state I regard as one of the characteristic fictions of scientific method. The Greek state marks the type of ordered society demanded by the needs of administration. To the Greeks (say, to the Athenians) I fancy that the city-state could more or less justify its claims to be the organization, the unity, and even the source of the moral life. This was because the Greek city-state was tiny, and because the imagination of the Greek citizen was of necessity (as compared with the range of view afforded by modern conditions) narrowly provincial. His art, his literature, his religion—every part of his life found its chief source of inspiration in local tradition and local opinion. The modern situation is wholly different. For us of to-day the city-state is hardly more pertinent as a moral ideal than the polity of Abraham, Isaac, and Jacob.

But what I would chiefly communicate here, if I can, is the contrast, a contrast amounting to different orders of being, that I find between human life as viewed from the inside and from the outside; from the two "social situations," private and public;

and the peculiarly devastating transformations wrought by publicity. Some years ago I spent several days in a divorce court waiting for a case to be heard in which I was interested. What I learned was that, granting if you like that half of the persons who appear in the divorce court are morally negligible, it is the court that makes divorce discreditable; it is the "social institution" that converts what in so many cases is tragic or simply pitiable into something disgraceful. If married life generally were subjected to a similar publicity (and why not, if marriage is a "social," i.e. a public institution?), marriage itself would be made repulsive and ridiculous. Any private life is in danger of this when it becomes subject-matter for the newspapers. But to me this impersonal situation—for us, paradoxically, the result of modern means of "communication"—is not merely demoralizing and devitalizing, it is also (if I may coin a word) curiously derealizing. When I survey the row of faces of those sitting opposite me in the subway, it is not merely that I find them depressingly vacuous; I am thinking all the time how easy it would be to conceive these persons, in Berkeleian fashion, as so many ideas in my mind, as so many features of the subway picture which have no existence outside of the subway. And yet I know that each of those faces stands for an individual life quite as significant, for anything that I can say, as my own.

And nothing is more constantly interesting to me than the difference in what I seem to get from a person, almost any person, when he is talking to me alone, under conditions which imply a friendly confidence, and when I meet him in a group of even half a dozen persons. The private conversation is likely to be a revelation, not merely of moral estimates and desires, but of ideas and beliefs. I have had a scientific physician pledge me to secrecy and then tell me of cures that he had known to be wrought by Christian Science. I have more than once been in a group of sober, intelligent men, each of whom, after one had broken the ice, testified to remarkable "psychic phenomena" (which I find it very difficult to accept) that he himself had witnessed. And I have been at times both surprised and deeply interested to discover in philosophical colleagues an attitude

towards religion, amounting to a sort of religious belief, which was not remotely suggested by their published writings. All of this suggests to me that the Freudian theory of repressions, so far from pointing to anything abnormal or exceptional, states simply the rule of what we call "social" life. Social life, so far as it becomes public life, is not so much communication as repression. If I ask a casual acquaintance what he thinks about this or that, his answer is more likely to tell me what he will stand for, or what he conceives to be logically respectable. We don't tell all we think, least of all what engages our thoughts most deeply. And this not merely because we fear ridicule, but because it is so difficult to say what we think and it raises so many questions; and if we made it a rule to say what we think, just imagine the confusion of social life! Hence we adapt our conversation to what will serve the purpose. Surely this cannot be without significance for the logic of the "objective" view.

It will doubtless be admitted, as among the unimportant observations, that every man's view of the world of fact is surrounded by a "halo," or a "fringe," of imagination and superstition. My own conviction is that this so-called "fringe" is for each of us the very body of the garment of his life, the world in which he lives as distinct from the world in which he does business with his neighbour.[1] In the history of the human spirit I suspect that the consciousness of fact has ever been the smallest part of life. Or to borrow two phrases from Fullerton, the real world, "the world we live in," is for each of us his own private world; "everybody's world," the public world, is an artificial construction for practical purposes.

With this I have already passed from my moral prejudices to the corresponding "intellectual" prejudices. Coming, then, to the conception of "experience," I will say that for me all genuine experience is personal experience. And I believe that at bottom this is the meaning and the persuasive aspect of the modern scientist's appeal to experience. Mr. Dewey says somewhere that the modern appeal to experience was an appeal "from occult

[1] See *Moral Philosophy*, §§ 35, 41, 57.

essences and causes" to scientific method. But why not call it the appeal to the personal presence? Did this thing really happen? The reply of experience is, Yes, I was there. Or Jones, who told me—and you know Jones—saw it himself. And if this reply be rejected as coming only from uncritical common sense, then I invite a study of the typical form, illustrated by almost any scientific monograph, employed by the empirical scientist in explaining the derivation of a theory from fact: in 182– A discovered that, etc.; in 185– B found by experiment; meanwhile C had noted, etc. It seems that the whole purpose is to carry the story back to the personal experience of responsible persons, of persons whom in some sense we know and whose experience we may then be expected to share. And this means, if you pause to think of it, that in the last analysis the scientific appeal to experience is an appeal, not merely to personal experience, but to poetic experience.

As experience is personal, so also is truth. In my *Moral Philosophy*, a chapter on truth is entitled, "The Experience of Truth." The purpose of the title was to suggest what I conceive to be the question of truth. It is not, When do I *have* the truth? or even, When *is* this the truth? It does not mean, When does this result that I have reached accord with the criterion of truth? Such is precisely the kind of question contemplated in the issue between the coherence-theory of truth and the correspondence-theory. Following the coherence-theory I may say, This statement of the situation is internally consistent—in the sense, perhaps, that it satisfies the law of contradiction—therefore it is true. Following the correspondence-theory I may say that the statement accords with the facts. But I may say either or both without seeing anything of the object. The fact of "coherence," or of "correspondence," may be only added source of mystification. And my own question is, When do I *see* the truth—when do I see this to be true? Or (as I shall put it a little later) When *am* I *in the presence of* something real?

The answer that I have given is, When imagination is satisfied. I will not say that this answer does more than develop the meaning of the question, but I doubt whether philosophical

analysis ever does more than this. I am certain that it offers no logical criterion, and it is not my purpose to offer a criterion. A criterion (useful in its place) is a substitute for an experience. What I am trying to do is to grasp and to communicate an experience. What is it to see the truth? But what is it, after confusion and doubt, perhaps—to see that a musical composition, such as the Brahms symphony in C minor, is real music, significant music, and not a wandering association of tones? To my mind the two questions are of the same order.

After truth, logic. In my teaching of philosophy it has been my chief aim to convince my students, having in mind the gibes of the irreverent, that philosophers, however unusual their vocabulary and point of view, were dealing with the realities of human experience, only at a deeper level. But alas! in the effort to convince my students my own faith has been shaken. And to-day nothing seems to me to be more of a travesty upon experience, more of a caricature upon thought, than what is called "logic," especially the formal, or syllogistic, logic. The syllogistic logic is not even a good game. At the end of a course in the syllogism, what has a student learned? So far as I can discover, only some very simple geometrical relations between circles which a child of five could not be conceived to doubt. If this be logic, there is surely more logic in chess. The chess-board situation is a trifle closer to social life than the syllogism is to thought; and chess problems are incomparably more difficult than most of the "exercises" in logic.

Meanwhile, I should say that logic stands for an experience—namely, the experience of necessity, or of necessary connection; such an experience as seems to worry the soul of Kant in his *Prolegomena*. Now your textbook in logic is likely to begin with a series of definitions relating to terms, including the distinction between the "extensive" meaning of terms and their "intensive" meaning, between their "denotation" and their "connotation." The system of logic is then built upon the extensive meaning—that is, upon a scheme of classification which may be just as convenient as the alphabetical classification of a directory, and

just as meaningless from any other point of view; and the intensive meaning is quietly discarded as impracticable, as indeed it is. But this is to disregard all that is experientially "logical," all of that sense of necessary implication and inner connection which a logically curious mind, unacquainted with the literature of logic, would expect to have unfolded to him in a book on logic. And for the secret of this connection, if we are to find it, where shall we look? My answer would be, In the personality and situation of him for whom the connection is necessary and "logical." The only logical connection is a personal connection, the only logical necessity is a personal necessity. As for events, granting if you like that events show a uniformity of succession, nothing "logically follows." What "logically follows" follows only for a mind so constituted that it does so follow. And thus the logical connection is of the same order as the æsthetic connection.

I do not forget that from the point of view of the newer realism, and of Mr. Dewey, this is talking nonsense. For Mr. Dewey, as I understand him, "logic" resolves itself into "method," or scientific method—a method of getting from a given event to any other; and logic regarded as a science of thought (in the older phrasing) and ethics of belief, is part of the illusion of "consciousness." Now I have a wholesome respect for method, as indeed I have for all things practical. We cannot live, rather we cannot get along in the world, by logic alone. But I seem to see a difference, a difference extending to every part of human life, between thinking and methodizing, between believing and accepting. And I am never more conscious of the difference than in reading a logically respectable philosophical essay. The author begins with a statement of foundations—basic facts or basic principles—which are to compel acceptance. From this as an anchorage he extends his chain of argument, making each link irrefrangible as he proceeds, giving to the chain, perhaps, a further anchorage on the way. At points he pauses to recapitulate: "we now see that, since A is B, and B is C, etc."—the very word "since" making me wonder whether he sees anything but "the logic of his position." In the end his point is: the foundations are immovable, the chain is

irrefrangible, therefore by all the laws of method you are obliged—to believe or merely to accept?

For if I believe it will not be in deference to the method, but because, possibly in spite of the method, he has succeeded in conveying to me his vision of the situation—he has communicated an experience. And getting the experience I know that he is thinking and not merely talking, and that he is facing something real. The method may (or may not) aid in communicating the experience, but the "criterion" of belief will never be more than this: when I have got before me the point of view as a whole, with all of its ramifications and interconnections, do I find it convincing—am I also in the presence of reality?

From believing I come, by a change of terms, to knowing. Mr. Dewey makes it very clear that for him knowing is method—method of getting from one event to another. It is no immediate grasp of an object—no mystical experience. For him, indeed, immediate knowing is a contradiction in terms; things that are immediate are not known, but merely "given." It may then serve to put the question squarely if I say that for me knowing is an experience precisely (if you like) "mystical." And I will also say that for me the most significant use of the verb "to know" in any literature is that of Genesis iv. 1, where we are told that "Adam knew Eve his wife, and she conceived, etc." And then we may remember that the mystical union of the mystics is presented as a union of perfect knowledge, and yet for the most part in imagery suggesting that the sexual union is never far from the thought. But, leaving aside the sexual aspect, which raises very interesting questions of its own, I will put the matter more soberly, as follows: knowing is an experience of personal intimacy. Let the personal implication be as much diluted, or merely adumbrated, as you please, what we mean by knowing can never be impersonal. This means that knowing is an intimacy between persons. Formulated in grammatical terms, it would mean that the verb "to know" requires both (1) a personal subject, and (2) a personal object.

(1) A personal subject: this means that knowledge is not method, but experience—knowledge is "mystical." And if the

distinction itself seems mystical (as indeed it must seem), let us fix our attention upon the implications of "method." The analysis of "method" is likely to ignore the fact that the method in question is the method of a living, thinking person. Yet it is bound to ignore this fact; for to methodize any task is precisely to put it into shape to be performed by any person whatever, or by no person. For modern industry makes it fairly clear that anything that can be reduced to method, like the various forms of accounting, can also be reduced to machinery. If scientific investigation could be really methodized we could dispense with the scientist. Meanwhile, scientific investigation remains a personal experience, often a highly dramatic experience. What is it to be a scientist—from the inside? What is the meaning of his motives, of his hopes and fears, of his background of presuppositions, or *Weltanschauung*? What is the quality of his imagination? At the least he is hardly so disinterested as required by "method"; and at bottom it seems that the "secret" of scientific discovery remains as incommunicable in terms of method—the experience is as much of a mystical experience as the experience of artistic creation.

(2) The experience of knowing, I say, is to be looked for in the knowing of persons; and this means that impersonal "things" are dealt with rather than known. If it be objected that the knowing of persons is strangely irrelevant to any of the necessities of knowing "as such," I will suggest that the strangeness may be due to what I have elsewhere called "the scientific prepossession"; which (having always in mind an ordered society) assigns the special function of knowing to the scientist, conceives the object of knowledge in terms of the special kind of things that he deals with, and thus closes our eyes to the greater part of waking human experience, all of it an experience of knowing. How is the knowing of persons different from the knowing of things, and what has the former to say to the latter? So far as I can see, this question is hardly asked. In the philosophical literature the knowing of persons is a curious, but never a central, chapter. In the history of epistemology the question is virtually ignored. And yet—I have space for only one suggestion—when I wish to know

why my neighbour does this or that, I ask him. If delicacy forbids, and if I am still curious, I quietly observe him; I put two and two together; and perhaps I try a trick of experiment in the form of a seemingly innocent question. That is to say, I use scientific method. The natural scientist, for obvious reasons, is confined to scientific method; he can expect nothing from direct communication. Does this mean, however, that direct communication would be foreign to the motives contained in his desire to know? Or simply that, communication being impossible, he takes the only course available; and then that the "things" he knows are for him as a man the things relatively distant and incommunicable, the things that he cannot know very well, and are converted into impersonal "things" by his method of dealing with them? The latter is my own suggestion, for which I seem to find support in the following. If my neighbour be many rather than one I resort to economic statistics; and thereby I seem clearly to transform them from so many human neighbours, each exercising his personal choice, into impersonal objects of science governed by natural, even by physical law. Yet meanwhile they remain, as "things in themselves,"so many human beings.

To bring the topic to a close, I will put the whole matter into terms suggested by the familiar claim of empiricism to the effect that reality is something "present" or "presented." What is it, then, that would realize my desire to know? My answer will be, To find myself *in the presence of* the object; or to get the object into *my presence*. But "my presence"—this is not a question of spatial or temporal location. Cæsar was murdered at the foot of Pompey's statue, but surely not "in the presence of" the statue! The train bearing away my departing guest leaves the station, say, in my presence; but when, lying awake in the small hours, I hear the initiatory puffs of a distant locomotive and recognize them as coming from the "owl" train leaving the junction-station three miles away, that train is also leaving in my presence; and if I could but get into my imagination the whole scene of Cæsar's murder, as clearly as though I were there, Cæsar would be murdered in my presence. "My presence," in short, is a question of the range and power of my imagination.

But what would it be, finally, to be in the presence of reality? Empirical science tells us that we are in the presence of the real when the facts correspond to and verify our hypotheses. But if they simply "correspond," do they then verify the hypothesis or merely echo it? A scientist facing a correspondence unbroken and unqualified would feel, I think, that the facts were mocking him. No, it seems that if you are to be in the presence of reality the facts must not merely "correspond," they must *respond*—with verifications which say, "True, but here is an aspect to the situation which you have not yet considered." This means that the process of "trial and error" must be something like a conversation. But then, what is it to be in the presence of reality? I will repeat here from page 274 of my *Moral Philosophy* an illustration used there in connection with the logic of resurrection and spirit-manifestation: "Suppose that a dead friend of yours appeared to you—say in your sleep. Suppose that you then had an old-time heart-to-heart talk with him—a real conversation, not a Platonic or Berkeleian 'dialogue' in which it is the chief function of one person to say 'Very true!' to the other, but a conversation in which each response stands for fresh thought." Then, I suggest, you would be in the presence of the real; and so far as you failed to get a personal object and a "conversation" you would be not quite face to face with the real. In other words, I should say that the experience of meeting another person and conversing with him is a far more conclusive experience of an other-than-yourself than any "stubbornness of fact" or "resistance of matter."

In coming to the end of my allotted space I realize that I have not succeeded in presenting the point of view in a manner rounded and conclusive. So many considerations have had to be omitted. But I doubt if I could make the story rounded and conclusive in many times the space. There remains, however, a question, the question which, I suspect, everyone who ventures to talk about philosophy dreads most to have asked him—because it is the most vital and searching of all questions: And what is your religion? For myself I can suggest only my idea of religion.

And I can best come to it by repeating the passage in which Pater explains to us "the essence of humanism": the belief, namely, that

> nothing which has ever interested living men and women can wholly lose its vitality—no language they have spoken, nor oracle beside which they have hushed their voices, no dream which has once been entertained by actual human minds, nothing about which they have ever been passionate or expended time and zeal.

Nothing about which they have ever been passionate or expended time and zeal! When I ask myself what it is to live, inevitably I am carried back over the nearly fifty years since as a boy of eleven I first began to work for my living. Except for being thrust upon the world rather early (partly because more than one school had found me impossible), I am not sure that the circumstances of my life have been on the whole either less fortunate or more fortunate than those of other men I know; and I am convinced that for what it is to live the circumstances of life make little difference. And yet as I go back and try to get the feeling of the years as they were passing, one after another, each different from the last, each with its own forward-looking tensity of doubt and expectation, it seems to me that to live is to live through—in the same breath to enjoy and to suffer—a tragic experience. And of those who have no "tragic sense of life" (in the words of Miguel de Unamuno) I have to wonder how they can ever have been passionate or expended time and zeal. But from this I am carried back over the vast expanse of human life, partly and dimly revealed in what is called history. And having in mind what it is to live, I feel that to think of this human life as "social progress"—from the "public" point of view—is inconceivably trivial. I can think only of the countless men and women who have been passionate and have expended time and zeal; for whom, as for you and me, life has been a tragic experience. And then I think that if I could conceive of a realm of being in which none of those lives would ever lose its vitality, in which no soul which has been passionate would ever cease to live—a realm of being not by any stretch of imagination to be put within the boundaries of the natural world—if I could

see this, then I should know that I had found a rational universe, a real universe, a spiritual universe, and a universe religiously significant.

PRINCIPAL PUBLICATIONS

Individualism: Four Lectures on the Significance of Consciousness for Social Relations. New York, Longmans, Green, & Company, 1911.

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SOME SECOND PRINCIPLES

By W. E. HOCKING

Born 1873; Harvard University, Cambridge, Mass.

SOME SECOND PRINCIPLES

IT is, I believe, both natural and usual that a vigorous religious trait in one generation should promote a philosophical trait in the next. The peculiar colouring of immediacy which belongs to religion, the pervasive sense of an unevident value in existence, cannot be precisely transmitted. But it is sure to be recognized, thought about, sought after. It is also almost as sure to be critically regarded at some time or other, to be analysed and explained away or rejected, as a preliminary to independent building. This was my own very ordinary experience.

The religion of my parents was concrete, vivid, and regulatory. It created a substantial and, on the whole, auspicious atmosphere around us. It furnished plenty of food for imagination, aspiration, and incipient rebellion. The world we were taught to live in was certainly not dull nor tediously safe, nor limited in its possibilities. Its unreachable places were not believed to be solitary or waste: they were the fields of a teeming though unexplored cosmical life. Bunyan and Milton were understood to be fanciful enough, but not wholly false to the situation.

The opportunities of life, under this view of things, were such as to elicit ambition and therewith a desire to know: I sympathized with our first parents. The ambition was not so much for scientific inquiry as for awakening: there seemed to be the possibility of an endless series of awakenings—or of convalescences. (Perhaps of the two a convalescence appeared the more desirable, as more gradual, deliberate, and serene. There were two such in my childhood, attended with dreams both alluring and terrible, such as one cannot yet forget, and with strange clarities and doublings of self-consciousness, such as one recalls without being able to recover.) In any case, the guise in which religion then appeared to me was that of something enviable, and the more so as it was something to be definitely and personally achieved. One had to take one's solitary way to gain it, and if one's search were successful, the result was not more a natural consequence than a boon from life to the seeker. It was both at once, as if growth up to this point had been a sub-

voluntary occurrence, whereas the last stage of growth had been accomplished with one's own co-operation. In it, something happened to one; and after it had happened, one could never again be just the same.

This, of course, is literally true of every significant happening. But the religious happening, as we thought of it, seemed a radical one, like the passing of the soul-function through some critical value which changed its sign. By it there was acquired no emancipation from any ill of fortune, but a new immunity from overthrow in any of them. William James's phrase is precisely accurate: the type of security achieved was "compatible with every relative danger"—whatever evil could happen otherwise could happen now. But it remains surprising to me that James regarded this sort of security as meaningless, "making no difference," when its whole point was that misfortune had become relative—that is to say, relatively unimportant. If the change was subjective, it was as if one entered into his heritage of health which set the ills of experience at true pictorial distance: they found their focus, and one had become adequate to one's world.

For such a view of things, naturalism in any form was not a matter of debate; it was simply a pathetic blindness and impoverishment, the outlook of a brain which had failed to ripen.

In this parental transmission there was another strand. My father was a physician, said to be skilled in diagnosis, and in this interest, as well as others, a lifelong student and reader. His practice took him out of his office for several hours of each day; and from the age of ten or thereabout I was called upon to take my school books into the office, surrounded by his books, instruments, and drugs. I soon began to find an interest in the books of medicine: they became my first independent field of curiosity. I dipped into the forbidden *materia medica*. One experiment in this field bade fair to be costly. There was in current use at this time, as an inhalant for certain pulmonary diseases, a mixture of oxygen with other gases. During one of my solitary sessions I undertook to inhale the gas, and finding the effects

pleasant, continued to do so until I lost consciousness. I was found, perhaps soon after, by an entering patient. Thus in many ways the dependence of the mind on the body, the sensitive and fragile nature of the mental flame, made its impression and strengthened the growing conception of man as an animal organism, quite without any clear sense of antagonism to the dominant supernatural outlook. My father himself, in full view of all this, was sternly pious—that was sufficient at the time.

It was partly through this medical browsing that I was prepared to appreciate my first philosopher. In the 'eighties, Herbert Spencer was still the great name in English philosophy. At the moment when reflection came on me, I fell under his spell. In our household he was, as I promptly learned, a forbidden writer; nevertheless I made my secret way through *First Principles*. As a lad of fifteen I had nothing to oppose to his plausible dialectic. Thoroughly against my will, and with a sense of unmeasured inner tragedy, Spencer convinced me. For years I plodded through his volumes. It was an unmixed discipleship, and so far an experience of great intellectual joy. Spencer had the truth—such modest truth as was to be had. He had written blank mystery over the original splendour of the uncharted world. His view demanded unqualified resignation to the outlook of animal death—to me a sweeping desolation; for I had been seized almost violently with a sense of the uniqueness of individual life and I could hardly endure the thought of annihilation. But Spencer's philosophy explained all things, the extra-beliefs of religion among them, only too well.

My interests for a number of years were dominantly scientific and mathematical. I entered training for a career in engineering. I spent four years in field- and map-work connected with surveying and the civil engineering department of a Western railroad. In the Iowa State College at Ames I studied physics, chemistry, and economics, worked in the laboratories, and became absorbed in the calculus. In the earlier routine of the schools I had taken particular pleasure in geometry, and I continued for a number of years to read independently in mathematics.

This reading has not yet gone far enough to make the unravelling of advanced physical theory a pastime. But it has sufficed for two things: to dispel fear in the presence of a mass of the esoteric symbols of mathematics, and to render me immune to a certain over-estimation of the value of mathematical method in philosophy by which the non-mathematical are widely victimized.

Almost everything fitted into Spencer's outlook. There were three exceptions which I now recall. There was a book, J. B. Stallo's *Concepts and Theories of Modern Physics*, which made some of Spencer's discussion of physical ultimates appear elementary and unimaginative: this was the beginning of disillusionment.

Then there was a simple human performance, a bit of personal unselfishness in my behalf which disturbed the wooden fabric of Spencer's theory of altruism. The matter was of no great moment, but it distinctly failed to smack of evolution. It appeared to me then as a sample of an irrational factor, which I recognized as shot through the fabric of Western civilization, and as constituting its chief claim to be a place worth living in. This judgment began to work havoc in my sense of the finality of the naturalistic scheme.

The last of these disturbing factors was a picture of the human mind so veracious as to command confidence and so living as to shame the physiological apparatus of Spencerian psychology. That was William James's *Principles*, of 1890, a book which I happened to pick up in browsing through shelves of the library at Ames. I cannot say what its argumentative value was at the time; it proved nothing, so far as I recall—it was merely a release; it left all the systematic work to do. But it irrigated certain tracts that had become desert. I began to regain confidence that the mystic's sense of the universe is in substance a true sense, quite apart from his theological symbols. I was sure that the real world is more like the world of James's imagination than like that of Spencer's, and from that time it became my first business to define the difference and to capture some rational account of it.

I did not then know that this would become my life's occupation: I thought that with James's guidance my philosophy could shortly be settled. I came to Harvard to find James. James was not there; for two years he was absent in Europe. But other great teachers were there, of whom I had not known.

George Herbert Palmer was teaching the history of philosophy and ethics as few men have ever taught them. In teaching them he conveyed his own metaphysics, largely through occasional and unforgettable sentences, which as someone well put it, "continued to glow in the dark of the mind." Santayana was there: I heard him, admired his adroit intelligence and deft phrases, felt his essence inwardly repugnant to my own, and, with the intolerance of a young bigot, avoided him, to my great loss. Dickinson Miller introduced me to the argument of idealism and gave me an opportunity to re-read Spencer under wise direction. Münsterberg was there: in due time I entered his seminary, and through him and through the reading of Windelband began to touch the massiveness of German learning. Royce was there: I listened to his lectures on metaphysics and felt power and more than power—a certain intellectual majesty and moral greatness. I was attracted to his view and held by the massive dignity of his thought without being wholly persuaded by his argument.

My prevalent state was one of unrest and impatience. I was hoping for systematic truth. Instead, I was gathering here and there an idea, listening to thinkers whose views conflicted and who seemed to be resigned to that situation. I wanted to be convinced of something, and the best reasoners left me critical and unsatisfied.

When James came, in 1901, I went to him with the enthusiasm of deferred hope. He read his marvellous manuscript on religious experience. The stuff of that work was grist to my mill: James was indeed a liberator, and in his presence life was in the saddle. Yet James's method, or lack of method, and his results left me confused and unsatisfied. My days of discipleship had passed with the passing of Spencer's domination, and with the most ardent desire to do so, I could not again become the disciple of any. Remembering these earlier years at Harvard I have ceased,

as a teacher, to expect to produce assent in men between twenty and thirty.

It was in the natural order of things that one began to look toward Germany, where the texture of thought seemed at once so fine and so powerful, where, as one believed, there had been at least once an adequate profundity and technique. Harvard gave me the opportunity to study in Germany as Walker Fellow. I would like to detail, if it were possible, my obligation to Natorp, Husserl, Paulsen, Dilthey, Simmel, Windelband, Rickert; and my still deeper obligation to Kant, Fichte, and Hegel, whom I began to study minutely. I must particularly mention the value of Husserl's discipline, and his insistence on the importance of Hume and Mill. I returned to Harvard with a new power to appreciate its guidance.

James was at this period developing and driving abreast his pragmatism and pluralism in seminary courses for advanced students. He was recommending Charles Peirce's *Tychism*, according to which such order as there is in the world "results from chance coming and survival of the more coherent." This view "eliminates the 'problem of evil' from theology" and "goes with empiricism, personalism, democracy, freedom." The temptation is strong to dwell upon William James and drop the prosaic theme of this paper; perhaps I may serve both interests by quoting from a letter I wrote to him at the close of his course of 1903–4, indicating some comments his lectures had roused:

> Are not all systems arrogant simplifications? What is materialism but a simplification, resolved to do justice to our natural ties at all costs? What is idealism but a simplification? What is monism? A simplification at the expense of the abundance and surprise of life. What is pluralism? It, too, is a simplification which values the richness and drama of living too deeply to fill in the connectives. All the structural red-ink and lettering in which the architectural engineer delights are for the architectural artist an abomination: they burden and spoil his picture. The philosophical synthesizer must be a strong man; whoever writes a plausible philosophical thesis must be a strong man. These are the tyrants of truth. . . .
>
> A word about "arising." I doubt whether any empirical notion of "coming into being" can be framed. Empirically we know that we have before us a plurality of things, and that this plurality varies. The things are not labelled, however, with regard to their origin or destination. Why suppose that any of them has twinkled into existence first at a distance, and then has come together with others? Things do indeed appear to twinkle into being; but they do it before our eyes. To me, things seem to grow out of one another. A *mind* seems to be a brooding-place where being is continually hatched from previous being. The only security I feel in the universe is that nothing can come into being except under such conditions, and hence always with respect to what has been before. This hypothesis gives scope for any sort of freedom and individualism that can be of interest to anyone. . . .

Royce was concerned with bringing the sciences into comradely relations to philosophy, and especially with exploring the consequences of the *rapprochement* between logic and mathematics. I find these remarks in a lecture note: "Philosophic efforts since Kant have remained incomplete by lack of the study of the processes of thought embodied in the living sciences, and of such categories as number, quantity, space, time, cause, continuity. . . . The mathematician, in so far as he consciously distinguishes significant from trivial problems, and ideal systems, is a philosopher. The philosopher, in so far as he seeks exactness of logical method in his reflection, must meanwhile aim to be within his limits a mathematician." This was to me welcome doctrine. Under Royce's guidance I studied the concept of number, and conceived the idea of writing a "morphology of experience" in which the mathematical idea of a "group" should serve to define and explain the distinct boundaries of the several sciences.

In pursuit of this project, I began to investigate some of the primary relations between physics, psychology, and sociology. Here the problem of the knowledge of minds other than our own proved fruitful enough to occupy me during the period of my doctorate. The results took shape in a *Philosophy of Communication*, Part I, of which there was never a Part II.

It is impossible now to trace the sources of convictions that grew during this time, some of which have remained. One such, which came to me with the force of an intuition, was that the

supposed isolation of minds is an illusion; that we share identical objects, and in so doing actually merge or coalesce in our being; that whatever meaning can be attached to the phrase, to be *within the mind* of another, is realized in the actual situation. For Nature is veritably a common object; there is but one Nature —not one for each person: and while for every pair of communicating minds perspectives and qualities differ, space itself is identical, and continuously identical.

This judgment puts an end to subjectivism of a solipsistic variety; but it might accord with a mutual subjectivism, in which the objectivity of a physical object lies in the circumstance that other minds agree in perceiving it. This I rejected on the ground of another conviction, that the kind of knowing which we call empirical is a sign of dependence. The obedient observation of fact, which belongs to the empirical attitude, implies that we are recipients of an activity from without. That objectivity of the physical world whereby we consider it as not-ourselves is due to its source in this active non-ego, not to the fact that it is shared by each one with other equally passive or receptive knowers.

So far, my theory of knowledge was realistic. But what we receive, we also retain and reproduce. In memory and imagination, we show an activity which answers immediately to the impressed action. There is some positive reason for thinking that this creative capacity of ours is of the same sort as that impressed activity; and this consideration became the ground, or one ground, for a third belief—namely, that the active non-ego is a self. It is through our primary relations with this self that our relations with other finite selves become, in the first place, consciously personal. Our first and persistent object of knowledge is the active self; our other objects are derivative.

In this underlying and substantial self I recognized the Absolute of Royce's teaching. But I further recognized it as the object of that mystic experience whose significance James had begun to do justice to. With this identification, a great strand of speculative and religious tradition could be interpreted and saved for human as well as philosophic uses. Royce's dominantly

negative attitude towards mysticism, which he so profoundly interpreted, becomes unnecessary.[1]

But if this too lengthy narrative has had any value, it has now reached the point at which further pursuit is unprofitable. There is something about thinking which dissolves away its historical roots, even to the personal knowledge of the thinker. So, in spite of a warning from my daemon that the thing is bound to be a set of rough logs rather than a building, let me set down some of the views to which I have come, simply as materials for a philosophy. For the most part, they are not provable; nor are they in any general sense axiomatic. They are merely *my* axioms—judgments for which I no longer need proof. But they are also judgments which, by proof or otherwise, I should like to recommend to others.

1. The principle of *ambiguous simplicity*.—Neither the world nor anything in the world is unambiguously complex or unambiguously simple.

The world is not cleverly put together, in such wise that a gifted man by sufficient ingenuity can guess its structure. It lends itself freely to analysis, and in this analysis ingenuity and wit have free scope. But, on the one hand, the task of analysis is never done; and were we to depend on it for our bearings we should necessarily despair of any result. Atomism is a necessary expedient in physics: in philosophy it is a will-o'-the-wisp. There are no indivisible units of the world in space and time: there are no ultimate ions or sub-ions of which we can say, these are the last refinement of Nature's subtlety. Strange that anyone should think contemporary physics to be in touch, at last, with the most minute phenomena! Atomism means hopelessness.

On the other hand, complexity is never the whole truth, not even of the world as a whole. Like a self, the world has an aspect of complete simplicity. The possibility of metaphysical knowledge depends on the presence within the intricate mesh of things of

[1] I may say that in his last, as yet unpublished, lectures on Metaphysics, 1915–16, Royce's attitude has gravitated far toward that appreciation which his lifelong interest in mysticism foreshadowed.

various comprehensive simplicities, and at last as a unity which is accessible, and, indeed, a persistent datum of consciousness.

2. The principle of *initial empiricism.*—Everything that is worth knowing about the world, including metaphysical knowledge, is to be known in experience; for experience is metaphysical—it is dealing with reality. This does not exclude a priori knowledge, for experience contains a priori elements which subsequent reflection brings to light. Thus a priori knowledge is the last in order of time to be recognized and isolated.

It must be observed that experiencing is an art, not a gift. Receptivity to the accessible gamut of being has no resemblance to an inalienable and automatic sensorium. A lethargic empiricism which "waits to be shown" will report a truncated world shorn of most of the characters which make experience tolerable—in particular, of its connections and unities. Empirical knowledge has sometimes been credited with the advantage of bringing minds to an agreement on facts, whereas a priori knowledge is discredited by a fatal disagreement as to what is "self-evident." By this test empiricism must be still more discredited; for what one finds, another finds a myth! Compare the "given" manifold of Kant with the "given" of Avenarius or of Münsterberg. There can be no agreement on what is given, when givenness is the object of a state of ideal mental vacuity; for philosophers will always vary in their capacities for becoming dramatically inane. Experiencing is not impressionism: it is the receptivity of an ideally active mind.

With this understanding we may assert that from the first experience presents wholes as well as parts. Empiricism cannot consist, then, in going from the parts to the whole. Empirical knowledge grows from a sketch, in which the whole is outlined and parts are placed by internal development of structure and detail. Induction and generalization do not proceed *in vacuo*: the shapes they assume are *elicited* by the preconceived whole.

In this process one's conception of the whole is altered. Induction finds anew the premiss which defined the data for that induction, and to this extent is circular; but each induction

gives it a better definition. Thus there is a principle of alternation in knowledge, as well as in the life of the will.

The pragmatic method represents half of the truth: universals are to be discovered *in rebus*. Principles of law, for example, are to be found at work in the decisions of particular cases: the meaning of the generality is to be seen in its power to do this work. The other half of the truth is that the particulars mean the universal: the cases are of interest for the light they throw on the principles of law. Aristotle's conception of the nature of the political state is nowhere more penetrating (or more Platonic) than when he describes it as an arrangement for the progressive discovery of the nature of justice by way of the public discussion of examples. The law is no more for the sake of the case than the case for the sake of the law. Our conception of the universal grows; but it remains the same universal—we are dealing with an eternal object. It is as much our human business to enjoy the contemplation of that object as to apply or embody it in practice; in fact, embodiment cannot flourish without contemplation. Here I part company with the purely pragmatic or instrumental conception of the universal, and of the business of life.

In another direction I am parting company with both Hume and Kant, who agreed that the categories are not found in experience. I cannot adopt the view that the material of experience awaits the ordering work of mind to assume its consistent and intelligible form, partly because on Kant's own principles the material of experience, as well as the thing itself, is a meaningless conception without the categories. It is the object which is given to us and not merely the material for the construction of the object; and our possession of the category as an idea is a result of its prior presence in the world of objects. On this basis, which reverses Kant's view, the ontological argument holds good for all the categories, so far as they are logically irreducible, i.e. the presence of the idea in us implies the existence of the corresponding character in reality. Thus Kant is consistent in attacking the ontological argument: it is the central enemy of his system.

There are many thinkers who feel obliged to be Kantian with

regard to our social experience who are not Kantians anywhere else; because, as they assume, other mind than our own is not given, and in the nature of the case cannot be given. We can only *interpret* our world as social, imposing upon its plain, natural stuff, object for me, the new category of other-observers, so that nature becomes *object for us*. My conviction is that this extension of the Kantian principle is its sufficient refutation. For the imposition of a private category upon a given stuff leaves the situation private, and directly contradicts the meaning of social existence. It assumes that the social relation cannot be experienced but only *meant*; but if this is true we cannot so much as mean social experience, and the category disappears. In whatever sense we mean the social object, it is *there* for our experience; in relation to at least one such other self, our idea and our experience fuse.

3. The principle of *inclusive rationality*.—Experience is the initial form of all knowledge, and experience presents a world of data. But there is nothing in experience which is mere fact or datum.

This is to say, not that all which exists is rational, but that there is a reason for the positive and irrational character which runs through things—reason has the last and inclusive word. Hard as it is to maintain philosophical courage in view of the expanding scope of what appear to be ultimate matters of fact, from the existence of anything at all to the last details of scientific discovery, we can certainly not *prove* that these things must be taken for ever with a pure natural piety; for the proof would rob that piety of its purity. Neither dare we *assume* that anything is just blankly there. For if we begin with this assumption, we can give no reason for not admitting more of the same sort, and finally "accepting the universe" in complete intellectual abasement. The understandableness of things is a necessary assumption.

It may be taken as a corollary of this principle that the world unity is not dead. A pure datum might easily be a dead fact, such as material atoms were once conceived to be, impenetrable, unchanging self-existence; and any such dead fact must be a pure

datum. To deny that there is any mere datum is to deny that there is any being which can neither account for itself nor be accounted for by other being. The inclusive being would be sponsor for itself and for other beings.

It is, indeed, impossible, as Spencer alleges, to avoid assuming self-existence somewhere. But it is an error to suppose, as this proposition suggests, that it is a matter of complete logical indifference where you assume self-existence. The self-existent must be intelligible to itself if not to us; self-existence, then, must go with self-consciousness.

It follows that there is no *telos* without a *nous*, and no world of essences without a subject.

4. *Tentative mysticism*.—Our thought is never, in point of time, adequate to its total object.

This is not, as Bradley held, because relations are irrational and we must think in relations. Nor is it, as Spinoza thought, because determination is negation. Nor is it, as Bergson teaches, because concepts are rigid while reality is fluid. It is because the concepts we have to employ for our predicates emerge to our ken in an experience which is selective: the one can only be characterized by way of that repeated effort of induction which yields the starting-point for a new revision.

We never know finally what the real is. Nevertheless there are certain predicates which we may apply to it, because they are subject to a parallel unfinishedness. As reality eludes description in terms of other categories, so does the *self*. Various systems of psychology may be worked out, internally consistent, mutually inconsistent, and all inadequate. If we characterize the real as a self, we express the unknown in terms of a commensurate unknown, an infinitude of the same order. We do not destroy its mystery, but we render intelligible its qualitative relation to human thought.

There is an obverse of this tentative mysticism which, if we liked technical designations better than we do, we might call *explorative pluralism*, namely, that just in so far as the One eludes definitive characterization, the sphere of the clearly

definable remains plural and open towards future experience. The One has a character, and is thus no *ex post facto* form or omni-hospitable afterthought; but our knowledge of it must grow by that type of recurrent induction in which the instances are never all in.

Thus the world is a one, but for our handling a many. The self, likewise, is a one; but its unity splinters against the growing variety of the situations it has to meet. It is a will, and also a bundle of instincts; its programme of life is not deduced from a preformed purpose, but the purpose slowly arrives at a sense of its own substance through the pursuit of a vast variety of goods not overtly related, and always ready to send out independent branches. So, too, with the principles of our conduct: the one commandment does not displace the value of the many counsels; the manifold injunctions of Deuteronomy and Paul eke out the simplicity of Moses and Jesus; and no concentration of ethical essence in Kant or elsewhere can render useless the irresponsibly numerous sayings of Ptah Hotep or Confucius or Epictetus. Second principles remain for our philosophy more wieldable than the first principle, and on the whole more useful, provided always that they are *well known to be second*; for in that case the life of the first principle is in them to animate them, to discover their limitations and keep them in place. And they become contributory to the next, and more adequate, formulation of the one.

5. *The union of value and fact.*—The great dualities must be treated like other forms of pluralism for explorative purposes, but in most of them we have something better than a blank postulate that the two aspects of things belong together.

In the case of value and fact, we have a clue to their union in the enjoyment which is inseparable from being alive, and especially from *knowing*. Objects are *goods* simply in their character as objects of cognition, whatever their further relations to our purposes may be. As related to our health, disease is not a good; but as an object of scientific interest disease is as good as anything else in the world. Pain itself, taken simply as intense

sensation, is so far good—and there is an art of so taking it. The knowledge of persons as scientific objects has a peculiarly iridescent value-quality, inasmuch as it is attended with a sense of self-defeat which can be suppressed only at the expense of *malaise* of conscience; for the adequate knowledge of persons is attended by a specific value called love, and conversely, any purely "objective" psychological observation of persons fails precisely of objectivity. Cognition and value are co-extensive; and the more adequate cognition has the higher degree of worth.

Evil is in no sense abolished by the pervasive presence of good in cognition: the world is as good and as bad as we find it to be. But the proportion between evil and good for us is a function of our voluntary adjustment; and the question of importance for theory as well as for practice is whether there is anything in the nature of the world which decrees that our findings of good must be moderate. For myself, I cannot believe that the principle of temperance has any metaphysical standing. The finding of good has its conditions, not its limits.

These conditions seem to be mainly twofold. First, a rather ruthless and uncompromising objectivity of mind. For value has to be discovered, not derived from our inner hunger; craving rises to the level of what the world offers—it would be preposterous to limit that offering to the original meanness of subjective craving. Second, a conscious recovery of the practical presuppositions which live in "subconsciousness." For the value-sense, as well as thought, has its a priori elements which come to light only through subsequent reflection. Discoveries, or recoveries, of this sort may express themselves in the form of paradox, as that seeking implies some sort of finding. Though these paradoxes constitute an apparent mockery of the seeker, they indicate a condition without which life for a rational being is not worth living. For rational life rises to the pursuit of goods which can be gained only at the end of infinite time; and if satisfaction must be thus deferred, the "pleasure of pursuit" becomes the blind pleasure of the fool. What is necessary is a present attainment which makes the continuance of pursuit, not superfluous, but eternally endurable. To discern that one is

in presence of a goal, though not the final goal, is a remedy for despair; and such "anticipation of attainment," which I take to be the essence of religion, is an achievement which the practical mystic reports and undertakes to make available. No one can pass judgment on the value of existence without considering the report of the genuine mystic.

These reflections are sadly unfinished; but a finished set of reflections would misrepresent an unfinished philosophy.

PRINCIPAL PUBLICATIONS

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THE WAY OF OPINION

By THEODORE DE LAGUNA

Born 1876; Professor of Philosophy, Bryn Mawr College, Penn.

THE WAY OF OPINION

THERE is an element of scepticism in all philosophy, and the degree of emphasis which is given to this element is largely determined by the accidents of personal and social history. In America the sceptical element has never been prominent. The moral seriousness of democratic life has kept it in abeyance. In pragmatism, as well as in neo-Hegelianism, it might easily have bulked larger; and it would not require a very perverse ingenuity to exhibit William James and Josiah Royce as descendents of Ænesidemus. That is not how they viewed themselves, however, and it is not in that direction that their influence has mainly tended. The realistic movement of recent years is even more decidedly dogmatic in temper, and had its origin in a revolt against certain idealistic theories—notably that of the essentiality of relations—which were believed to have sceptical implications.

It happens that my own thought during this last quarter-century has belonged to the fringe and not the centre of American philosophy; and its general tendency has been in the direction of a more and more radical scepticism. That, too, is, of course, largely a matter of emphasis, and it would not be hard to show that every doubt had a core of conviction; but the doubts remain, and in my own mind they have become increasingly prominent. The beginnings of the tendency are probably to be found in a long and painful endeavour to escape from the trammels of the Lutheran pietism in which I was brought up. I found it exceedingly hard to win freedom of thought, and probably should never have succeeded if I had not, in my middle twenties, been plucked away from home influences and set down for a time in the midst of a people of alien race to think my way to a clear self-consciousness. It was fortunate for me that I had come under the instruction of two teachers of great ability and strongly opposed views. Both, indeed, were idealists; but one (Howison) was a deeply religious neo-Kantian, while the other (McGilvary) was passing through a phase of left-wing Hegelianism. Either alone would doubtless have made me a disciple, and I should

have passed from the faith of my boyhood to a new faith no less constraining; but between the two I was left to flounder—awkwardly enough, but at liberty.

The ambition of philosophers of the grand style has been to organize science into a system of reason, starting from definite data in the form either of self-evident principles or of particular contents of sensation, and proceeding step by step without logical circularity. For part of the system the universal premises were alone to be used, and the procedure was to be rigidly deductive and certain. This part of the design has now shrunk to the limits of pure mathematics, and there is a general conviction—which I share—that all pure mathematics is deducible from logical principles the denial of which is nonsense, and which may therefore be regarded as tautological. For the remaining part the particulars of sense were to be included, and the procedure was to be fundamentally inductive and to be confined to probabilities. So-called rationalists and empiricists have differed as to the relative extent of the two parts of the system; but the general design is common to both. To my mind the design, so far at least as it is concerned with knowledge of real existence, is chimerical. The history of science gives it no support. Human reason is never simply constructive, but always reconstructive. Science, like common sense, is at all times a going concern. There are no Cartesian doubts, no fresh beginnings. Reflection takes its rise, not from axioms and sense-data, but from habitual expectations and prejudices. We have always a multitude of general beliefs in accordance with which we interpret each new matter of fact; and though any one of these beliefs may at some time be called in question, this is always on the supposition of the acceptance of a host of others. Science, accordingly, can never be a system of judgments with one-way relations of implication. Our judgments support one another. And when, as occasionally happens, they contradict one another, there is no ultimate standard of imperishable truth by which they can be tested. The only standard is the vague and shifting standard afforded by our beliefs in general.

It is the demand for a system of reason that has shaped our

theories of induction. These theories have sprung from the assumption that men must somehow be able to draw conclusions from particulars of sensation, *plus* at most some a priori principles of logic. It has been generally admitted that induction, as thus conceived, could yield no certain results, but it has been confidently assumed that it could yield probabilities. This I believe to be a mistake. If we had to start from particular facts and logical principles alone, we could never make the least advance toward an understanding of the world. There is no reasoning except deductive reasoning. General principles having special relevance to the matter in hand must always be assumed. The belief in peculiar processes of induction, by which we might pass from singular to general propositions, and from these to propositions of higher and higher generality, is a pure delusion.

We are all familiar with the conception of the world as a grab-bag containing balls, the colours of which we have to learn by experience. We know at the outset that there are balls in the bag, but prior to actual examination we know nothing about their colours. We have no reason to suppose that all are of one colour, or that there are many colours, or, in the latter case, what the proportion and distribution of the various colours may be. That is to say, prior to examination of the balls the colour of each ball is a separate and distinct atomic fact. Under these conditions it has been supposed that if, as a matter of fact, the first n balls taken from the top of the bag were all black, there would be an appreciable probability that the next ball would be black. If black balls were not relatively numerous (it is argued) it would be improbable that n balls in succession would be found to be black; and since the first n were actually black this is evidence that black balls were indeed relatively numerous, and so there is a probability that the next ball, or any other hitherto unexamined ball, will be black. This, however, will not hold. What has been observed is that in the given region of the bag a certain number of black balls occurred; but there is nothing to delimit this region, and, furthermore, all those black balls have been removed and are no longer liable to be chosen. On the given supposition no conclusion follows.

Of course in real life the suppositions would be very different. If I pulled twenty black balls in succession out of a bag, I should be very strongly inclined to expect that the next one would be black. I should be inclined from the outset to regard the presence of the balls in the sack, not as a multitude of atomic facts, but as a unitary phenomenon calling for a more or less uniform explanation; and I should quickly begin to regard the blackness of the balls as a characterization of their source. I should, then, draw an inference; but it would not be an inference derived from particulars and logical principles alone.

It is only very slowly that I have been brought to this position, and yet it is hard to recall the steps by which it was reached. Logical speculation has a way of continually reabsorbing its premises as it goes along, so that at each stage the results present themselves as something primitive and underived. It is a straining after the self-evident, and in the measure in which it succeeds it vanishes. For the same reason it is hard to recommend a logical theory to another, whose own speculation has not definitely prepared the way for it. If it is not obvious, it is paradoxical. In the present case the leading influences have been two: first, the study of the classical English theories of induction, especially those of Bacon, Hume, Mill, and Whewell; and, secondly, certain features of the pragmatism of James and Dewey. Add to these the analysis of particular alleged inductive arguments, which never revealed any reasoning except deductive reasoning. I was interested to find that Lalande, after a much wider study of the history of inductive theories than mine, was tempted to accept a similar conclusion: that there is no way of providing a logical justification for inductive inference. Lalande, to be sure, has suggested the possibility of an ethical justification. Induction, so far as he can see, is an unsound method of procedure; nevertheless we may be morally bound, for the sake of the practical consequences, to reason inductively, as if such reasoning were sound. That hardly seems to me to be a way out. I cannot see my way to an obligation to reason badly.

That the older theories of induction will not hold—that, in particular, Mill's attempt to lay down canons of inductive proof

is a failure—is now widely recognized, although the hope is not renounced of finding something satisfactory to take their place. But to my mind the failures of the past are not simply negative facts; they illustrate very clearly the position which I have taken. Consider, for example, Mill's method of difference. According to the canon, one single circumstance is to change. As a matter of fact, in every instance countless circumstances are changing; but the great mass of these we ignore as irrelevant. Only experience, however, can tell us what is relevant, and our judgments as to possible relevancy often turn out to be ill-founded. But let us suppose, for the sake of argument, that the conditions are satisfied and that it is known that only one relevant circumstance has changed. No basis for any significant generalization is yet given. We must know also which among the *unchanged* conditions were essential to the occurrence of the phenomenon. Otherwise the experiment tells us nothing with regard to any other concrete case. If the experiment warrants a logical conclusion, that is because it is interpreted in the light of general principles derived from previous experience. The same sort of comment is called for by Mill's other methods. Standing alone, they are worthless. It is only when brought into the historical continuity of human experience that they amount to anything.

Among the most interesting of recent attempts at the validation of induction is that of Russell in his little volume, *The Problems of Philosophy*. I single it out for mention here because, during the last fifteen years, Russell's logical theories have occupied a good deal of my attention, and the study of them has had much to do with shaping my own views. Russell proposes to found induction on an independent and fundamental a priori principle of reason. The principle of induction, he says, cannot be established by experience, because we must possess and apply it in order to prove anything by means of experience. His statement of the principle runs as follows: "(*a*) When a thing of a certain sort *A* has been found to be associated with a thing of a certain other sort *B*, and has never been found dissociated from a thing of the sort *B*, the greater the number of cases in which *A* and *B* have been associated, the greater is the probability that they

will be associated in a fresh case in which one of them is known to be present; (*b*) under the same circumstances, a sufficient number of cases of association will make the probability of a fresh association nearly a certainty, and will make it approach certainty without limit" (p. 103). What has impressed me as significant is the fact that, if this principle be assumed as axiomatic, it does not in the least help us to draw any inductive inference; for it affords no means of determining even vaguely or approximately how many instances of the concomitance of *A* and *B* are necessary to establish the conclusion with any appreciable degree of probability. A million instances may be barely enough to excuse a faint surmise. To say that as the number of instances increases the probability increases, is to say, in effect, nothing at all. Similarly, it is idle to assert that with a "sufficient" number of instances the probability closely approaches certainty, for there is nothing to indicate, even in the vaguest way, what a sufficient number may be. Perhaps two would be enough. Perhaps the number of the sands of the seashore would be inadequate.

This is the sort of consideration that has brought many men to the confession that inductive reasoning is a mystery, and that has brought me to the conviction that it is a myth. Russell, I believe, had set himself an impossible task, which he felt constrained to accomplish; for he aimed to set up a system of reason, for which inductive proof is essential. Finding it impossible to justify induction otherwise, he sought to found it upon a special axiom. But there is no axiom of induction; and if there were it would not be of the slightest service to us.

A like reflection arises in connection with the principle of the uniformity of nature, which others have tried to use as a basis for scientific induction. This principle, in itself considered—that is, apart from the specific uniformities which men have already learned—contributes nothing at all to any inductive argument. To know merely that nature is uniform is to know nothing with respect to any particular alleged uniformity, such as the conservation of mass or the atomic weight of lead. Any of these may turn out to be imperfect, and the uniformity of nature will

nevertheless remain unimpaired. Since, then, nothing can contradict it, nothing can be inferred from it. It is not this perfect, but utterly abstract, uniformity that we use in our reasonings; it is the uniformity embodied in the questionable, but particular and concrete, laws of nature with which previous experience has acquainted us. The upbuilding of human knowledge is a continuous evolution.

The relation of this view to pragmatism is too close to be overlooked, and the direct influence of William James in its formation was doubtless very great. As a young man I heard the lecture at the University of California, in which James's pragmatism was first proclaimed; and during the following years, in which my thoughts were deeply unsettled, his writings became my principal study. I always found in him much that roused my opposition; there was, perhaps, no single doctrine of his that seemed to me wholly acceptable; but the evolutionary conception of human knowledge which underlay his particular theories impressed me as being exceedingly important and fruitful. My first book, *Dogmatism and Evolution* (written in collaboration with my wife), contained an appreciation of pragmatism from this point of view.

There was another feature of James's pragmatism that impressed me—namely, the prominence given to beliefs, as opposed to knowledge. On James's part this was, perhaps, mostly a matter of convenience. It is hard, if not impossible, to find examples of knowledge which the reader can be counted upon to admit; for the tribe of sceptics, if not numerous, is at any rate well distributed. But though we may fail to recognize knowledge, there is no such difficulty with regard to belief—that is a familiar enough phenomenon. Hence it was good pedagogical, as well as controversial, policy to let epistemology take its start from belief rather than from knowledge as such. But there was involved the further reflection that the hard-and-fast distinction between knowledge and belief, as it has been maintained in the rationalistic tradition from Plato down, will not hold. The only tenable distinction is one of degree, not of kind.

The characteristic mark of knowledge has been its objective certainty. When we know, we believe very strongly; we are very certain of the truth of our belief. But more than this is regarded as being necessary for knowledge. The most intense and unswerving belief may be erroneous, while knowledge is necessarily true. That a man has no doubts may mean only that he is thoroughly mistaken. What we know must be not only certain to us, but certain in itself. This notion of objective certainty involves, I believe, a serious confusion. For the certainty that knowledge requires is not merely truth: to believe the truth is only to have a right opinion. Such certainty is not reducible to the relation of logical implication, for that relation can subsist between false propositions as well as true. We may formally define the certain in itself as that which is necessarily certain to all rational beings who understand it and who understand the grounds upon which it is based. But there is no way to bring all rational beings to such a test. Our expectation as to a general assent must be based upon our own actual assent. We may subject the matter to a critical review; we may take all possible precautions against emotional aberration; we may demonstrate to ourselves and others over and over again. But all that leaves the certainty mine or yours or theirs; it does not depersonalize it.

Shall we say that the actual condition of science is intolerable? We recognize that it is no system of reason, that it involves assumptions which have their roots, not in factual data nor in axiomatic principles, but in habits and associations. But does this mean that science must be refounded, that its present condition is sadly precarious, and that only when logical grounds have completely replaced all merely psychological grounds will its conclusions have real probability? I do not see that we are driven to adopt any such position. The condition of science appears to me to be excellent; and if it were not I do not see what reason we should have to hope for any considerable betterment. If the conclusions of science, taken generally, have not a high degree of probability as they stand, what probability can there be that any future demonstrations will increase their

probability? Scientific knowledge has the best claim to the title that any beliefs can have. It is reflective, critical, subjected to continual review and to verification and correction on every hand. The personal reference remains, but it is reduced to the last degree of tenuity.

Nevertheless it remains, and this may be seen in the form which the progress of science takes—the same form which we observe in the history of human standards generally, even those which are most flagrantly emotional and subjective. There is a series of shifts from one orthodoxy to another, marked by a conflict of parties, liberal and conservative. We have recently seen the scientific world divided in this way over the theory of relativity. The same phenomenon regularly takes place on a smaller scale whenever any less profound revision of the accepted laws of nature is attempted.

It would be a mistake to suppose that in such a case the settlement is reached by rational procedures alone—unless the term "rational" is stretched to cover all processes by which we form more and more comprehensive views of things. When exceptions to a law are noted and repeatedly verified, the law is not necessarily revised, much less given up. It is always possible to refer a discrepancy between expectation and observation to the action of unknown disturbing causes. A scientific law, be it remembered, describes what happens "other things being equal," and other things may easily not be equal. So long, then, as the principle continues to do its great work of co-ordinating our experiences, occasional exceptions do not weaken its authority. We accept them, as the conservative man of affairs accepts the evils incidental to the operation of our political constitution and machinery of trade. But when do the exceptions become more than occasional? When do they impeach the validity of the principle and make revision imperative? How do the weaknesses of the old theory compare in seriousness with those of the new theories that are advanced? Division on these questions is largely determined by sentiment and character and personal associations. And the division is healed and a new orthodoxy reached, not when all the difficulties are logically disposed of, but when it is generally

felt that the discrepancies that remain are no more than we are bound to expect.

One of the chief preoccupations of two generations of philosophers has been the nature of truth. It has been assumed without question that truth has a nature—that is to say, that there is a common property which all true propositions possess and which all false propositions lack. I have become convinced that this assumption is groundless: that truth has no nature, and that there is no property whatsoever that is common to, and peculiar to, true propositions. Truth, I believe, is an expression which has meaning only "in use." When a given proposition is said to be true, we know what that means; but, as I understand the matter, there is no meaning of truth in general—there is no room for a theory of truth.

I was predisposed to this opinion as a result of the spirited controversy between pragmatists and absolute idealists which enlivened the early years of the century, and which died away in futile countercharges and restatements. Both sides, it seemed to me, were guilty of radical inconsistencies. Both were strong in refutation, but neither was able to give a straightforward and consistent account of its own position. The suspicion arose that there was a very simple and familiar reason for this: that the controversy was over a shadow, and that, to speak strictly, there was no theory of truth to be established.

Truth appears as a predicate which may be affirmed or denied of any proposition, as the predicate "yellow" may be affirmed or denied of a given object of perception. But there is this remarkable difference. However the proposition, "This is yellow," may be restated or transformed, "yellow" remains a constituent and is never simply dropped. Yet that is exactly what happens to the predicate of truth. To affirm that a given proposition is true is precisely equivalent to affirming the proposition itself. If it is true that the given object is yellow, then it *is* yellow; and conversely. Similarly of the predicate of falsity. It purports to be the negative of "truth"; but as a matter of fact it is the equivalent of negation in general. To say that it is false that the object

is yellow is simply to declare that it is *not* yellow. This is all that the explanation of truth or falsity in any particular case amounts to. They have no general meaning. If they had, that meaning could not be eliminated without change in the implications of what is asserted. In the above example, "this" is the subject, and the predicate asserted of it is "yellow." To take, instead of "this," a proposition as the subject, and to predicate truth of this proposition, is a mere form of speech. The real subject and predicate remain what they were before. The quality of truth is an idol of the market-place.

It is worthy of note that when formulæ are constructed, from which the predicate "true" or "false" cannot be eliminated, the formulæ are nonsensical. This is illustrated by the verbal paradoxes to which the name of Epimenides is attached; but the principle is of wider extent. In the case of the formula, "This is false," where "this" is supposed to denote the formula itself, the difficulty is not confined to determining whether the formula is in fact true or false; it is primarily a matter of interpretation, and the same difficulty arises in connection with the formula, "This is true." When in either case we try to determine *what* is affirmed to be false or true and thus to eliminate the predicate of truth or falsity, we are unable to do so. In the latter case, for example, what is affirmed to be true is simply that *this is true*, and the predicate that was to be eliminated is left on our hands.

The usual course in dealing with these paradoxes has been different, and it has resulted in uniform failure. The secret has been thought to be that no real proposition can directly or indirectly refer to itself, or even that it can never be applicable, however indirectly, to itself. The proposition that every proposition contains a universal is doubtless true, but, according to this way of thinking, it would be a mistake to try to apply it to itself. In place of such an application, one must have a distinct, but analogous, proposition on a higher level, so to speak; and one must have other analogous propositions on higher and higher levels without end. Such a theory may be plausible, but it can never be made logically secure. There must always, at some point or other, be an express or tacit resort to a reducing

principle, which refers to all levels and belongs to none. The difficulty is thus only postponed, and ultimately the whole scheme collapses in utter futility. But no such scheme is necessary. There is no reason why a proposition should not be asserted of propositions in general, or why it should not be applied to itself. The paradox of Epimenides lies in the *predicate*—a predicate which is intelligible only when it can be eliminated, and which here cannot be eliminated.

Just as the distinction between truth and falsity is at bottom an illusion of language, so the distinction between appearance and reality, together with the great historical opposition between realism and idealism, reduces to a similar illusion. The real is that which really exists, i.e. that which may truly be said to exist. The apparent is that which certain evidence leads us to suppose to exist. There is no mutual exclusion involved in these definitions. The real may or may not be apparent; the apparent may or may not be real. Reality, moreover, has in it the same absolute ambiguity that truth has. What reality means depends upon what is affirmed to be real. In any particular case we know what it means; but there is no universal common content involved. There is, for example, nothing in common between the reality of Shakespeare's genius and the reality of the planet Neptune. Again, the real figures as the object of possible knowledge, while the apparent is the object of belief. Just as the attempt to distinguish knowledge definitely from belief breaks down, so does the attempt to set up an absolute reality in opposition to mere appearance issue in a total failure.

The general position which has been outlined above has gradually made its determining influence felt in all the particular departments of philosophy in which I have been actively interested. It used to be assumed that all problems, with few exceptions, had solutions, just as it was supposed that diseases, with few exceptions, had cures. We might not know the solution or the cure, but it was there to be known and our task was to find it. We have learned to have very little faith in cures; and for my part I have as little faith in solutions. In particular,

questions of the form, "What is the relation between A and B?" seldom admit of a definite answer. When it is asked, for example, what the relation between soul and body or between mental and physical events is, I am disposed to reply that there is no one uniform relation involved, and that the search for such a relation yields only self-deception and disappointment. If this is in itself a solution of the problem, let us make the most of it.

Science is so far from being a system of reason that it has not even the external appearance of a system. Our knowledge grows in spots, and the enlarging spots interpenetrate and fuse—like grease-spots, as James wittily remarked; however, there are large areas which are only imperfectly connected with one another, and between which we pass with a sense of an abrupt hiatus. Comte made this a cardinal principle of his philosophy, and declared that between the higher and lower sciences of his hierarchy there was a gulf fixed. Chemistry was not reducible to physics, nor biology to chemistry. Radically new concepts, as well as new methods, were in each case involved.

As a young man I used to wonder—as many others have wondered—whether Comte's divisions were really absolute: whether they might not be overcome, and whether, if this was not to happen, the reason did not lie merely in a great difference of complexity. It now seems to me that the recent history of physics and chemistry goes a long way toward answering these questions—mainly by revising them. If we ask whether the chemistry of 1850 or 1900 was reducible to the physics of 1850 or 1900, the answer is doubtless in the negative. Nevertheless the gap between chemistry and physics has been materially cut down. This has involved a profound modification of chemical conceptions and—what is more important for our present purposes—an equally profound modification of physical conceptions. If the two sciences are ever to be really continuous, it is not likely to be by the reduction of chemical phenomena to physical terms as we now know them. The physics which is also a chemistry will be a strangely altered physics—how different from the present we have no means of conceiving. If biology also is to be brought into the union, the new science, while historically

continuous with that of the present day, may easily differ from it as profoundly as our science differs from that of Empedocles.

Here, I take it, lies the weakness of materialism. It is the same sort of weakness that belonged to Descartes's thesis, that all physics is reducible to geometry. One may twist one's words so as to find in the general theory of relativity a partial verification of the thesis; for has not one great force been reduced to a spatial conformation in things? It is a verification which would have shocked Descartes. When it is claimed that all mental phenomena are describable and explicable in physical terms, the claim is silly if the physical terms are understood to be closely related to those now familiar to us, and it is empty if the terms may differ from these to an undetermined extent. If "physical" is defined so as to connote merely an agreement with the principle of the uniformity of nature, the claim is equally empty of significance; for that principle, as we have seen, is purely formal and contains no information whatsoever. Materialism can only be made plausible by being allowed to mean as little as possible. When it ceases to be indefinite it becomes ridiculous.

Much the same thing has to be said of spiritualism. It sees a gulf where materialism sees nothing but continuity; and it has as little claim upon our respect. It assumes a fixity of concepts which history is far from suggesting; and at the same time it indulges in the utmost vagueness. If we only knew what the "soul" meant! The soul is a name which has moral and religious associations of the utmost importance—not all of them very wholesome or desirable, to be sure. For the understanding of ourselves and the world we live in, it is nearly worthless. Leave the term undefined, and disbelief in the soul seems monstrous. Define it, and it is a mystery how such an entity can perform any of the functions that are assigned to it. It is an organism without organs. There is mental heredity, the transmission of characteristics from soul to soul; but there is no continuity between a given soul and the souls from which it inherits.

A sceptic learns to avoid such embarrassments by not pretending to know too much. Ultimate questions are for him useless questions, because the asking of them strains our conceptions to the

breaking-point. All our science of nature is limited by conditions of which we are at best only dimly aware. In all reasoning from experience we assume the irrelevance of a multitude of factors, any of which may be found by later observation to be essential. When we speak of *the* specific heat of mercury, of *the* atomic weight of lead, of *the* distance between the earth and the moon at a given instant, we give hostages to fortune. We must, of course, speak in just such ways—we must take risks, we must give hostages. But we need not, while we give them, fancy ourselves free.

Such elementary considerations as these have gone far to determine my attitude towards some of the newer movements in philosophy, notably those connected with *Gestalttheorie* and emergent evolution. *Gestalttheorie* has been generally regarded as having to do with psychological phenomena, but it is intended by its principal advocates to be equally concerned with physical and social phenomena. Can the action of wholes be explained by the behaviour of their parts? To me the question has no precise significance. The whole may or may not act in a way which we should never have expected from our previous acquaintance with the parts. The relational structure may or may not involve essential conditions that lie beyond the limits of our scientific experience. From the point of view of method, *Gestalttheorie* is amply justified—unless, indeed, it is used to choke off all further analysis. But nothing has a nature of its own, apart from the configurations into which it enters. All behaviour takes place under specific environing conditions; and the notion of the nature, or characteristic behaviour, of a thing is a construct from its reactions under all the conditions in which we observe it. The study of wholes carries with it, therefore, an enlargement of our conception of the parts. Whether, therefore, the whole is explained by the parts or not depends largely upon the accident whether the parts have been previously studied in analogous wholes.

Gestalttheorie owes its real significance—which I take to be very great—to the specific dogmatisms which it opposes, and to the new lines of experimentation which it has accordingly initiated. If a generation of comparative psychologists had not

tried to evaluate the intelligence of animals by testing their ability to learn to use devices entirely unrelated to their whole previous experience and habits, there would have been much less point in the suggestion that if intelligence is to be measured it must be given an opportunity to act.

Emergent evolution is surprising evolution. Every attempt to make anything more out of it ends in tautology or in unhistorical dogmatism. The new laws that are cited arise admittedly in accordance with older laws, and are accordingly embraced by them. The new entities are either new configurations (of which I have just spoken) or new elements; and in the latter case there is nothing to show how deep the novelty goes. To characterize the appearance of life where the necessary conditions of life have not always existed as "emergence" implies that we know well what organisms are and what the inorganic is, and that no continuous transition from the one to the other is possible—that there is a hard-and-fast line between the living and the lifeless. We know nothing of the sort. The same may be said of the rise of consciousness. That lies outside the field of our knowledge, and there is nothing to gain by trying to capitalize our ignorance with a word.

It can be argued with equal plausibility that we know nothing about the universe and that all that we know is about the universe. Obviously a distinction is called for. Every affirmation of a law of nature is a characterization of the world we live in. Every affirmation that a particular event has occurred or will occur implies the denial of a law of nature—namely, the law that such an event cannot occur. Granted, then, that we have any knowledge at all, it would seem that we must have knowledge of the universe. The difficulty lies in the fact that all laws of nature, as we know them, are subject to limitations which we do not know. Our experience is circumscribed, and when we vaguely assume that what lies beyond the horizon is to all intents and purposes like what lies close at hand, we expose ourselves to contradiction, and, as a matter of fact, a widening experience not infrequently contradicts us. There is no possible means of

discounting this possibility, or of precisely and sufficiently defining the actual limits of the world as we are acquainted with it. In this sense, then, we know nothing about the universe.

Our explanations of things run in two directions. Sometimes we analyse things into their parts, and account for the behaviour of the wholes in terms of the behaviour of the parts. Sometimes we regard things in relation to larger wholes, and find the explanation of their behaviour in their environment. Thus we reach smaller and smaller elements and larger and larger systems. It is to be observed that the mere breaking up of things into parts adds nothing to our understanding of them. I can go on till doomsday describing the irregularities of a common brick, and science be no whit advanced by the performance. The only parts worth considering are relevant parts—that is to say, parts that are relevant to the understanding of some specific mode of behaviour of the whole. Similarly, it is not every larger whole that counts. We can find such things *ad libitum* and be as ignorant as before. The case is not altered, but is, if anything, more obvious, if the parts or larger wholes are essentially hypothetical. The breaking up and the compounding are alike step-by-step procedures. We have no means of advancing either to an absolute element or to an absolute whole.

All cosmologies are figures of speech. To take them literally is to make nonsense of them. Plato's conception of the universe as an animal organism—an organism without an environment—is typical. The common theistic conception of a creator and his work, involving an infinite intelligence for which no problems exist and an infinite power adapting means to ends, is also typical. Such conceptions have, I believe, no value at all for the purposes of theoretical explanation. There is no science of the universe, and there is no science of God.

From a logical standpoint, cosmologies are the result of an ignoring of the historical limitations of human knowledge. However, they commonly have motives of another order altogether: they are expressions of the religious spirit. The belief, for example, that the universe is an animate being is held, not because of tangible evidence that can be offered for it—though

men who hold it may seek to bolster up their faith with proofs—but because it seems to the believer to ascribe the highest possible value to the world in which we live and the life we lead in it.

What I have to say about religion and its relation to philosophy is very much what a multitude of other men, in and out of the Christian Church, are saying. For the fixing of my thoughts on the subject I owe much to a brief association with the psychologist Irving King, a member of the Society of Friends. I supposed at the time that King must be regarded as extremely heretical by the fellow-members of his Church, and only much later learned that the Society of Friends is not a Church, that it has no creed, and that King's theories are in great part virtually a generalization of views widely held by thoughtful members of the Society. This I say by way of acknowledgment and not with the intention of offering my views as anything but my own.

To regard the contents of a religious faith as consisting of so many scientific or philosophical theories is almost inevitably to condemn them, but it involves, I believe, a very serious misapprehension. What a belief amounts to depends upon the experience that has gone to the formation of it. Now the amount of experience that is represented by religious dogma is enormous. In a way, it may be said to be co-extensive with human life itself. It is, in short, experience of the values of things, and especially of those things which are felt to make existence most worth while, not only for the individual, but for the society of which he is a member. The fact is not to be overlooked that the logical relevancy of the experience to the particular dogmas that arise out of it is always questionable; but the more important fact is that, in their way, the dogmas do sum up and represent the experience. The conception of a heavenly father, for example, is not sufficiently disposed of when it is labelled "anthropomorphism."

It is correct enough, so far as it goes, to speak of religion as a means of getting good things. It is always that, but it is more than that. What is fundamental is the conception of the good things that are to be secured, the happiness that is to be enjoyed. It is this conception that pervades the rites and ceremonies and expresses itself in the particular articles of faith.

Thus in a hunting people the religion may centre in festivals that secure the reproduction of the totem animal; in an agricultural people, where the annual crops stand out as the most important thing in life, we find the feasts of the sowing and the harvest prominent; when success in battle seems to be all in all, it is a god of battles that is worshipped; and as the conviction forces itself upon men's minds that no such external goods, but wisdom, justice, and charity are of supreme value, the great ethical religions arise.

One of the most striking features of the rapidly shifting scene of the last few centuries has been the way in which one scientific theory after another, which the great majority of sincere believers have regarded as undermining the very foundations of Christianity, has found its way to general acceptance, and yet Christianty has continued to flourish. The first great example was the Copernican theory; a recent example, which even now does not belong entirely to the past, is the theory of the evolutionary origin of species. If in the year 1850 a representative group of men from any Christian denomination had been asked whether it was inconsistent with their faith to hold that man has descended from a brute ancestry, they would with practical unanimity have answered in the affirmative. Yet there is now a great body of educated Christians for whom transformism is a commonplace, and who are no more weakened in their faith by it than they are by the reflection that the earth goes round the sun.

The reason for this phenomenon is, I suppose, that what is really essential to Christianity has not been materially disturbed —namely, the moral experience of Christian people. A creed, as such, is a relatively external manifestation of an inner spirit. It is a partly rational, more largely imaginative construction, a conceiving how the world must be constituted and governed if the real values in life are what the worshippers have found them to be. Such a construction is always framed in conceptual terms which the common consciousness of the time takes for granted as unimpeachable, but which may to any extent be modified by later scientific and philosophical reflection. So long as Christian men and women retain a consciousness of supreme moral obliga-

tion, and so long as that obligation includes a recognition of love, or charity, toward all as the guiding principle of the best life, their religion will be far from extinction.

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MY DEVELOPMENT AND PRESENT CREED

By JOSEPH ALEXANDER LEIGHTON

Born 1870; Professor of Philosophy, Ohio State University.

MY DEVELOPMENT AND PRESENT CREED

I. My Intellectual History

As an undergraduate, the studies which influenced most powerfully my intellectual development were chemistry, biology, and historical geology. From chemistry I gained an appreciation of exact scientific procedure; biology and geology quickened my imagination with a sense of the vastness and complexity of the march of life. In philosophy I was most influenced by Aristotle's Ethics, Leibniz, Kant, and Green. It was, I think, Green's *Prolegomena to Ethics* which, more than any other influence, turned me in the direction of philosophy as a vocation—not his metaphysics, but his reverence for the free spirit and his noble passion for social liberty and progress.

But I hesitated between biology and philosophy as major interests. I think it was the accident of receiving a graduate scholarship in philosophy at Cornell that turned me definitely toward philosophy. It has always been difficult for me to confine myself to any one field. I am as much interested in geology, geography, anthropology, cultural history, and literature as I am in technical philosophy.

The summer after graduation I read with enthralled interest James's *Psychology*. This book permanently influenced me. I have always since felt much sympathy with James's views—his pluralism, temporalism, and meliorism, his vivid appreciation of the individual.

At Cornell I devoted myself chiefly to the history of philosophy, logic, and ethics. The thinkers who most influenced me at that time were Plato, Aristotle, Leibniz, Fichte, Hegel, and Bradley. I felt then that an adequate philosophy must be based on a synthesis of the cosmology of Leibniz with the cultural or historical philosophy of Hegel. Of course the Aristotelian *motif* is obvious in Leibniz. The monads are modernized entelechies. I was much influenced by Bradley's brilliant *Logic*. I did not then fully appreciate Bosanquet's contribution to epistemological and metaphysical logic.

It was an exciting event to find Bradley's *Appearance and Reality* at the publisher's. But, in one respect, I was disappointed in it and in his later writings. While Bradley made it very clear that finite centres are not illusory, that the Absolute is nothing apart from its appearances, I could make little of his Absolute—the utterly harmonious, timeless Experience. To me, this is the great stumbling-block in Bradley, less so in Bosanquet, because he does not say very much about the Absolute. When Bradley says that the statement that the Absolute progresses is either blasphemous or unmeaning, I quite fail to follow. What is there unmeaning in supposing that the whole of being might grow or shrink in value? How can one say that the Absolute is nothing apart from finite centres and then deny that the expansion or decay of finite centres has the least bit of significance for the Absolute? James is right in insisting that, if personal lives have any real significance, then change is not sheer illusion. It does not follow, of course, that there cannot be a changeless order or structure of reality.

As for the blasphemy, one is simply puzzled. If the heart of religion be to affirm the reality of goodness through every aspect of one's being, where is the irreverence in believing that goodness may increase? I thought, when I read them, that Bosanquet's two volumes, *The Principle of Individuality and Value* and *The Value and Destiny of the Individual*, were a more constructive contribution to the interpretation of reality than Bradley's *Appearance and Reality*. I still think so. What I owe to these thinkers is a more adequate conception of the notions that have lain at the heart of my thinking since about my seventeenth year—individuality and value.

Bosanquet's further contribution lies in his rich and penetrating insight into the significance of the historical cultural life. He is a British Hegel and, in some respects, a better-balanced one. The strength of the idealistic movement lies in its knowledge and appreciation of the historic and social cultural life of humanity, and here Bosanquet is at his best.

On the other hand, in their social philosophy they exaggerate the significance of the social *ethos*—the institutions, the traditions, the objective spiritual structures—and minimize the value of the individual. It is somewhat strange that philosophers who have developed the notion of *individuality*, as the criterion both of reality and value, should assume such an attitude of lofty indifference to the uniqueness of the human individual.

Of course, this over-emphasis on the social *ethos* is a reaction against the abstract individualism of the eighteenth century—of the rationalists and utilitarians. Also, perhaps, the notion of a timeless Absolute has something to do with it.

At any rate, at no stage in my own thought could I accept this attitude of apparent indifference to the uniqueness and value of the *individual person*, any more than I could accept a timeless Absolute.

My friend and teacher, Creighton, said I misunderstood the idealists on these points; well I have continued in this misunderstanding, if it be such.

My feeling for the philosophical significance of cultural history was strengthened by my studies in the history of religion and theology at the Episcopal Theological School at Cambridge, Massachusetts. The school had two remarkable teachers, A. V. G. Allen, the author of *The Continuity of Christian Thought*, and Henry S. Nash. They were remarkable in their union of historical learning and philosophical insight with an enlightened religious mysticism. I afterwards went to Berlin and Tübingen, where I did not find their equals. Indeed, my sojourn in Germany brought no new philosophical stimulation. In this respect it was disappointing. Of course I enjoyed and profited by the acquaintance with German university life. The influence of Hegel on my thought was increased by taking a seminary in Hegel with Josiah Royce. I saw then (and I still hold) that Hegel's greatness lies in his extraordinary knowledge of, and insight into, the history of culture and the dependence of the human individual on the cultural *milieu*; his weakness lies in his frequent arbitrary and fanciful distortion of cultural history (cultural phylogenesis) and individual development (cultural ontogenesis) to fit the scheme of his dialectic method. There is a dialectic in the spiritual history of man the group and man the individual. But the history

of man and of the individual are too complex, too full of contingencies (so far as one can see) to be threaded out on the Hegelian or any other dialectic.

Among the recent and living writers I have been most impressed by the work of the German philosophers of culture, especially by Rickert, Windelband, and Scheler; also by Eucken's treatment of the various life systems or cultural syntagma. I confess that Husserl's phenomenology seems to me, notwithstanding its acuteness, thin-spun and verbalistic. I admire the massive contribution of S. Alexander. I acknowledge stimulus from the writings of James Ward, Josiah Royce, John Dewey, Alexius von Meinong, Bertrand Russell, and Bergson. Among the latest English works, that of Professor Whitehead impresses me as most significant, but I do not profess fully to understand it.

I think my own views have closest affinity with Royce's philosophy. I believe he strikes a better balance between the individual and the social than do Bradley and Bosanquet. Among the poets my favourites, because of their human and philosophical interests, are the Greek dramatists, Shakespeare, Goethe, Shelley, Wordsworth, Matthew Arnold, Browning, and Whitman. For his sheer artistry I have always loved Keats.

To sum up: the great thinkers who have influenced me most are Plato, Aristotle, Leibniz, Hegel, Bradley, Bosanquet, James, and Royce.

I proceed to a brief statement of my present views.

II. The Theory of Knowledge

Knowing is just as truly a natural event as breathing or digesting. The problems of knowledge and its unique prerogatives are simply the consequence of this peculiarity; it is through knowing that we become aware of what is done to us and what we do. But this peculiarity is not a sufficient ground for making such a pother over the mystery of the transcendence of the object of knowing and of the mind's leap over the yawning chasm, as some epistemologists do. A natural and workable theory of knowledge will be found by keeping our way between the fallacies

of subjectivistic mentalism and a pan-objectivism that denies anything unique in the cognitive relation. I find the matter rather simple. Clearly, if the objects of knowledge were constituted by the knowing of them, there would be no meaning in knowing. The uniqueness of the cognitive relation being abolished there would be nothing more to say. To say that cognition and the objects are compresent is not enough. Knowing, then, implies that the cognitive process does not constitute its data. These are given in cognition. They consist of sensory data and the native constitution of the mind as cognitive. In both cases what is known is not anything that we can say must exist, just as it is known, apart from its being known. Humanism is unavoidable. We cannot escape, in our knowing, from the conditioning structure of the psychophysical human organism. We cannot know the thing-in-itself. The quest for the maximum objectivity in knowing is just the enterprise of reducing the personal equation and looking at the objects as far as possible in the light of universally human conditions of perception and of the logical organization of sensory and other data (by other data one means here the data of the affective-emotional life of the human organism itself). This is to me the established result of Kantian and post-Kantian idealism. When the pragmatist claims to be the only Simon-pure humanist he makes himself ridiculous. Idealism is universal or objective humanism. Hence, in a sense, all our knowledge is of *appearances*—that is, of things as they appear to human organisms and of the relations that are found by the human thinking apparatus. Scientific knowing is the knowing of appearances, cleansed, as far as may be, from particular occasional and personal idiosyncracies. This is what reality is—namely, the most universal, fundamental, impersonally viewed systematic totality of appearances.

I am willing to say that knowledge rests on faith—namely, on the faith that the conjoint world of things and selves as it appears to us is a veridical appearance. Reality can mean nothing more than the maximally comprehensive or organized totality of the appearances. The "laws" of the relations among its elements are the ways in which these elements are interdependent. But this

faith that the appearances are real is justified, in so far as the taking of the appearances and their relations as real enables us to get along, to find our way about, to live and enjoy the conjoint world of things and selves. Since we have appeared in precisely this world and do, on the whole, live out our little days in it, since every dog among us has his day, our faith is partially justified. How could it be otherwise? Man is the offspring of the cosmos, and the better he knows his cosmos the more successfully he lives in it. In the most comprehensive sense, knowing is a human instrument. Thus far I agree with the pragmatists. But, while it is man's cosmos, there is in it a partial and ever growing harmony between the structure of mind in man and the nature of the whole which is responsive to the activity of mind. I am an empiricist in the sense that I hold that all our data and our ways of acquiring the data are empirically known. The coherence theory or criterion of truth is itself the most inclusive statement of the empirical structure of mind functioning in a world—that is, the mind is, as a matter of fact, so constituted that when it is attempting to think clearly and adequately to organize its data it cannot rest in contradictions and inconsistencies. That is the way the mind is made. Thus coherence is an absolute criterion just so far as it will work. But there are many different sets of judgments that are not inconsistent with one another, while on the other hand we cannot find any positive relation between them. I, for instance, find no inconsistency between the theory of relativity and my belief that I am to some extent a self-determining being. Both are probably true, but what their positive relation may be I do not now see. Each belief organizes and interprets satisfactorily certain data; but these data belong to such different realms that I fail to see their mutual interdependencies.

For me, the tests of truth are complex: (1) Negatively two contradictory judgments cannot both be true; they may both be false; or they may be partially true and partially false. (2) Positively a judgment is true if and when, eliminating the personal equation, it expresses qualities-in-relation which are based on some unavoidable experience (that is, unavoidable

under standardized or test conditions). The term "experience" is to be understood in the most liberal sense. The data of the moral, æsthetic, and religious experiences have as good a right to a hearing as the ordinary sense data. That they do not get this hearing in an age obsessed by mathematical and physical method only shows that this age of "science," like all ages of culture, has its own idols of the market-place.

Knowledge is conditioned by social culture, although not so much so as conduct. But the world we recognize, even in its "physical" forms, is an expression of forms of thinking and belief that have social validity. Our concepts of space-time, matter, causation, process, as well as our moral and æsthetic concepts, are assumed to be socially valid. It is a curious fact that even philosophers have generally assumed, without much critical inquiry, that there are other minds like their own. Even the sceptics do this, otherwise they would not express themselves. The situation is this—we assume, whether we are Trobriand Islanders, Pragmatists, Realists, or Idealists, that there is a public realm of space-time, matter, motion, life, etc., which is accessible to all of us, and that there is a *normal* mentality that enables us to communicate with one another through standardized physical instruments and conventional symbols. All communication is symbolic and rests upon the twofold faith in a community of the physical realm and a community of minds. And our concepts of the structure and behaviour of this twofold community are conditioned by our environing culture system which, in turn, undergoes slow and almost imperceptible alteration by the explorative probings and happy guesses of exceptionally endowed minds. But the community of minds is logically prior to the physical community.

I think that, as our cultural heritage increases, our knowledge and our resulting practical controls must take place more and more through the increasing organization and co-operation of individual minds. The day of the lonely genius is wellnigh, perhaps altogether, past.

I look forward to the time when science and philosophy will both be matters of planetary co-operation. But this time must

wait, I suppose, upon a more effective organization of economic and administrative instruments. On the other hand, I believe that to increase the work of intellectual planetary co-operation will facilitate the coming of the day when mankind will become one community. The absolute sovereign state is an anachronism and the greatest menace to the economic and spiritual welfare of the planetary community that now exists. While I should be sorry to see all diversity extinguished and all peoples merged into a standardized mob, I am an internationalist. If the leading nations of this earth do not learn to pull together they will severally commit cultural suicide.

A world language is a great desideratum, but no linguistic artefact seems to hold out much promise. Perhaps a simplified English will fill the bill.

III. Theory of Reality

The real universe, in the sense above defined, is a hierarchical system of individual wholes. It is not "really" made up solely either of "point instants," "electrons," or "persons." I cannot help regarding all abstract qualitative monisms, materialistic, energetic, or mentalistic, as philosophical juvenilities. Empirical reality (I know naught of any other) is complex and rich in structure. There are in it physical configurations of electro-magnetic character. There are vital configurations that probably are not the mathematical products of mere electro-magnetic configuration; there are reflective wholes (persons) that are qualitatively richer than mere animal configurations; there are in persons, super-reflective powers (the æsthetic, moral, and religious) which it seems to me indicate that man at his highest reach of being has richer and more immediate relations with the whole of reality than any lower order of individual. This last is the life of spiritual values which surely, no less than lower modes of response, are effective and valid responses to a quality of the cosmos.

I would put it this way: reality consists of a hierarchy of organizing forms, dynamic structures or centres of organizing

activity (like Aristotle's immanent forms).[1] The richer forms cannot be explained as arising from accidental collocations of the lower forms. That a rational value-creating and value-enjoying mind is nothing but an accidental by-product of electronic configurations is to me wholly unwarranted.

I welcome the doctrine of emergent evolution as the explicit recognition that the richer wholes or individualities cannot be reduced to the poorer. Where I quarrel with it is its failure to recognize that to say the higher emerges, but is not mechanically caused by the lower, is to admit that evolution is not an ultimate explanatory principle at all. Either all the higher forms have emerged from the lower—and there was a time when the former were not and then the higher are by-products of the lower—or the higher have not really emerged from the lower and evolution is merely a description, not an explanation. Indeed, when I contemplate the fascinating structural plans of the electron-proton in the atoms and the quantic jumps, there, too, I see that the merely physical is organized. The atom is a minute ultra-microscopic stellar cosmos. The organism is a much richer microcosmos, and so on we go, until in cultural humanity we reach the richest dynamic organizing formative principle. It is possible, though on the whole not to me probable, that the electro-magnetic is vital. I say improbable, because the modes of behaviour seem to me qualitatively and not just quantitatively different.

I have called these organizing forms *individua* or *monads* in *Man and the Cosmos*. The term *Monad* is, however, subject to misunderstanding. Leibniz was on the right track in holding that the constituents of reality are organizing centres of activity; but he went astray in making each monad a windowless self-existent substance. This mistake led to the artificial doctrine of the pre-established harmony of the various perspectives. It is correct to say that each individuum reflects the universe and is a mirror of it. But it does so because it is in dynamic and passional relation with the other individua. If the individua are in mutual

[1] If I apprehend him rightly, some such notion seems implied in Dr. Whitehead's *organic mechanism*.

commerce, then not only new individuals of one type, but new types of individuals may be generated, may emerge, and there is real creative evolution. With Leibniz's closed monads there could be no emergence of new types of individuality and value. Now, empirically these new types of individuality and value do seem to emerge. But their emergence is a finite temporal expression of the character of the whole cosmos. The cosmos, in its organic wholeness, can never have been merely spatio-temporal or even solely electro-magnetic. The hierarchy of empirical individua has its real ground in the nature of the living whole. This is what I mean when, in *Man and the Cosmos*, I say that there is a *hierarchy of orders*, all of which are levels or stages in the all-sustaining order of the whole. From the eternal or ultimate ground, for which no reason can be given (it always just is), there emerge, in finite temporal series, successive hierarchies of individuality and value.

The most significant all-inclusive quality of man is that he is the *creator of cultures*; of complex, continuing systems of social cultures—complexes of manners and customs, organizations of social-relationship, etiquettes, laws, arts fine and applied, myths, sciences (systematized methodical myths), and religions. He who knows only one culture knows none well. Our machine culture is new, all-pervasive and, spiritually and æsthetically, somewhat poverty-stricken. There have been other and richer cultures. Some of them still survive with great stubbornness. All our problems, concepts, methods, and valuations are interwoven and have emerged into being with our culture. Our concepts and valuations are mixed because our culture is a mixture, not a unified synthesis. The philosophy of comparative culture will deliver us from naïve parochialism. If it introduces an historical relativism it supports a humanism. It may be objected that this standpoint is a sheer historical relativism or scepticism. I think otherwise. Granted the mutual relativity of social cultures and selves, the central point is that cultures are at once the expressions and the media for the realization of self-hood or personality. The self-transcendence of the natural biological self-hood, through active participation in the cultural life, is the

self-realization of personality. In this respect Royce has stated the true view. Speaking of the relation between the general idealistic attitude and the colouring given to one's philosophy by one's individuality, he says: "This does not mean that the truth is at the mercy of private caprice, or that any man is his own measure of all things, without reference to other men. It *does* mean that the whole of philosophy can only exist in an essentially social form as the synthesis of many—yes, ideally speaking, of an infinite number—of individual and personal points of view, whose diversity will be due to the fact that the truth must mirror various aspects of its constitution in various ways to the diverse individuals. The world, in other words, interprets itself through us—that is, through whatever rational individuals there can be. Inadequate our individual interpretations, indeed, always remain. But they need not be monotonously inadequate. They must properly supplement one another." (*Lectures on Modern Idealism*, p. 242.)

And again, after speaking of the effort of logical and ethical and empirical inquiries to define common categories, he adds, "But when the best has been done to discover the common features of our various experiences and ideals, a most significant aspect of the universe will have been inevitably omitted in every such investigation. And this will be precisely the aspect of individuality in the universe. If the world is essentially a life of will and of thought coming to an individual consciousness of itself in and through various personalities whose social unity rests upon their very variety, the work of discovering the truth can never exhaustively be reduced to the work of finding out what these various personalities find or will merely in common. They all in common mean, intend, experience, and think the universe. They are all, therefore, as Leibniz said, mirrors of the universe. But since the universe is, from this point of view, just the system of living mirrors itself, what is common to the various world pictures is never the whole truth." (*Ibid.*, p. 243.) "A philosophy is essentially concerned with a unity of truth which can only be expressed through the variety of individual points of view." (*Ibid.*, p. 244.) In short, the last word of objective

idealism is that the universe is a living whole which expresses and realizes itself in and through an endless (to us) multitude of individualities or personalities.

The crown of metaphysics for me is "metahistorics," the metaphysics of culture. The universe is dynamic; even the ultimate reality traffics in time and is creative. There is cosmic change. In other words, change, life, belong to the very life of the cosmos. Any such mechanical scheme as Spencer's is ridiculously false. Life and mind are primordial constituents of the universe, not accidental by-products. But reality is not, and never was nor will be, disembodied mind.

IV. Ethics and Social Philosophy

The term "moral" may be used in two senses—a narrower and a wider one. In the narrower sense, "moral" denotes these active attitudes and their affective and intellectual sources which have to do with right social relationships. Right social relationships all have their roots in reverence for personality; personality meaning here a harmonious or integral self-hood. In the wider sense, "moral" may be used to include all values that minister to, and reside in, personality. In this wider sense, it includes æsthetic and intellectual fulfilment and has its culmination in the vision and devotion to the ideal of perfect value. My colleague, Professor Sabine, says that the concept of personality would better be abandoned in social philosophy, since a person is a subject of "rights" and suggests the contrast between the individual and the state. The historic rights-philosophy has done its work. To continue it is to overlook the fact that the ethical problem is one of multiple relations between individuals in many group relations. He would put "interests" in the place of "rights." I agree in principle, but I do not see why the term "personality" should be abandoned. A personality is a socialized individual, a psychic unit functioning and satisfying its interests in many group relations. A person is nothing worth while except in social relationships. Every interest of an individual involves social relationships. I would say that the fundamental concept

of ethical and social philosophy, and the one which expresses both the fact and the ideal, is personality-in-community, psychic individuality realized in many social individual wholes.

V. Religion

There is no self-realization or happiness for a reflective being except in devotion to super-personal causes, to social and super-social (æsthetic and intellectual) ends. I think Bosanquet is right in saying that wherever a man loyally throws the centre of his action and being outside himself there is true religion. While I cannot accept the claim that classical Christianity was an isolated supernatural revelation, I think its doctrine, that he that seeketh his life shall lose it, and he that loseth his life shall find it, is the highest spiritual principle revealed, not *to*, but *in* man. I find much the same principle in Platonism, and perhaps the highest Buddhism is not far from it. The paradox of paradoxes in our human world is that while values come alive only in persons, while the richest and deepest individuality and value is realized in persons, they do seem to be cast as aimless to the void. I cannot feel that the arguments for immortality, in the sense of the continuity of the individual life, are very strong. On the other hand, inasmuch as the richest reality and the fullest value inhere in spiritual individuality, inasmuch as the whole creation seems to move to, and find its fullest meaning in, the production of persons, I hold, as a matter of reasonable faith, to the perduration of spiritual individuality. Every man is a child of his time and culture. But it is given to man "in his own solitariness" (as Dr. Whitehead puts it) to react to the whole of things. This attitude of the individual spirit toward the whole of things—cosmic emotion and its imaginative setting—is his religion. Religion is a person's ultimate escape, release, redemption from his own solitariness. This must vary with the culture and the individuality of the spirit. But whatever it be—a Christian theism, a cosmic pantheism, an æsthetic mysticism, or an ethical mysticism—that there is such an individual communion with and worship of the spirit of the whole is significant. The

universe which engenders and seems to engulf these varied individualities is qualified by them. They cannot be sheer illusions. A merely humanitarian or "humanistic" religion is no religion at all.

The social factor in religion is of immense importance, but is apt to be over-emphasized these days. After all, spiritual religion is not either a political, ecclesiastical, or psychological system of police control. Spiritual religion has being in man only when he reaches mature self-consciousness. It is not a crowd-engendered emotional cataclysm. Nor is it merely escape from the world of "reality" into a realm of sheer make-believe, an illusory compensation for the stings and arrows of outrageous fortune. These notions of religion have arisen from rather crude social psychologies or too exclusive dwelling on psychiatric data. Spiritual religion is the total attitude of the mature spirit in man to the whole. It is not mere emotion nor mere pragmatic practicality. It is the imaginative and intuitive affirmation of the unity and supremacy of the highest life-values.

So long as man is man he will be religious. The highest form of religion is mysticism, in the sense that worshipful communion with the supreme unity of values has its roots in the immediate inner attitude of the person.

VI. Practical Applications

I may take space to say that I am much concerned with the headlong movement of our American capitalistic industrialism and democracy. We may be headed for a tremendous disaster, when we have burned up the major part of our natural resources, have speeded up quantity production and instalment buying until every one's future is mortgaged for several years in advance and we have all become slaves of the capitalistic state. I am convinced that what this country needs most is more general and intelligent interest in productively useless matters—in art, play (I do not mean professionalized college football), speculation. Our education seems to me scrappy, sloppy, superficial. There is neither continuity, consecutiveness, nor coherence in the work

done; consequently there is no appreciation of thoroughness, nor of relationships nor meanings. The things learned are largely chaotic jumbles of raw facts (which are often not facts), retained sufficiently long in the mind to add to the sum-total of time credits. The time credit is the only principle of unification in our education. There is not developed any sense for generalizations, relationships, meanings, values. Our education is too crassly pragmatic and episodic.

I see no way out except by a concerted effort to foster cultural ideals by abandoning our chaotic elective system (which is not a system) and establishing in the college a well-organized, coherent curriculum in liberal arts, built around an extensive and intensive study of two great phases in the history of culture.

Perhaps, if this could be done, its influence might seep down into the secondary schools in which, on the whole, it seems to me the work is rather bad in its intellectual and spiritual effects now. It consists chiefly in cafeteria displays to please the supposed tastes of the children and their parents who do not know what they want. The chief criteria of choice of studies are too often what will be immediately useful in one's vocation, or ornamental for social display, or easy to get by with. The disinterested impulse to muse upon, to speculate, to contemplate, is conspicuous mostly by its absence.

I do not think that American philosophers, with the exception of Royce, Dewey, and Adams, have shown a sufficient appreciation of the points of view and problems of a *Philosophy of Culture* or *Civilization*. They seem to me, on the whole, too much obsessed with the methods either of descriptive individual and social psychology or of natural science.

I hold that the central task of Philosophy, as the analysis and synoptic science of values (or selves), is not with psychological introspection of the poor passing moments of our individual consciousness nor with overt muscular behaviour. It is rather with those massive and enduring and also changing social complexes which I have called in *Man and the Cosmos* "social culture systems," or objective spiritual structures (Mr. Adams's term). One might take the history of art and of religion and morals as

his point of departure. But until one has worked his way into at least two systems of culture, so as to be able to compare them, he is not in a position to philosophize profitably concerning human values and the nature of mind. I would, if I could, make the study of two cultures—say the Greek and the Modern, the basis of the liberal arts course.

Our education is not only scrappy, it is one-sided. We emphasize but two things, bookish learning of facts and theories and mathematico-physical analyses. The æsthetic factor is still woefully neglected. Although there has been some improvement, we need to balance empirical and rationalistic analysis with the cultivation of the power of intuitive imagination; to cultivate the impulse to feel ourselves into and enjoy beauteous and significant wholes—a sunset touch, a chorus ending from Euripides, a sonnet, a lyric, a drama, a painting, a noble architectural or sculptural figure, the stars, the lives of organisms, human personalities. There is not only creative expression in the fashioning of words, musical sounds, pigments, wood, stone, and steel, there is creative enjoyment in which we fill out, creatively, our own personalities in the æsthetic experience. Living should be a rich, full-bodied art, and we are, as a people, such rank instrumentalists that we sacrifice the art of living to the machinery that should subserve living.

There is frequent clamour to-day that philosophy should be practical, that it should be put to work to give guidance for social reconstruction; it should furnish an applied theory of culture, education, the ends and values of social life. I agree heartily to this, and I have much sympathy with Mr. Dewey and his disciples on this score. My chief quarrel is not with the programme, but with the way in which it is carried out, especially by the "educators," who are, or at least claim to be, his disciples. I think that in their social philosophy the actual tendencies of American industrialism and democracy are accepted somewhat uncritically, and play too large a rôle.

I hold that philosophy fails of its mission if it be not applied in social philosophy to our actual problems. Probably the most influential single book in the history of thought is Plato's *Republic*,

Plato certainly wrote as a social reformer. A philosopher who has not, or is not seeking, a working social ideal is not of much use; but we must beware of cheap and easy social philosophies.

Summary

In brief, then, the universe for me is an organic whole, a living system. Its real constituents are active individual wholes, principles of organizing activity. It is a creative whole; at the highest known level it flowers in the creative cultural life of personality-in-community. New values emerge by the transmutation of older values. It may be a growing universe, but, if so, its growth is the empirical realization of individualities and values that are grounded in its eternally real possibilities. The spirit of the whole, the cosmic individuality, does not emerge, in a chaos hitherto devoid of it, at some juncture in time. Deity is not just a (possibly) emerging level higher than humanity. We have a good right to believe that the realization of interpersonal and spiritual values is the highest empirical expression of the secret of the whole, which must be a community of selves.

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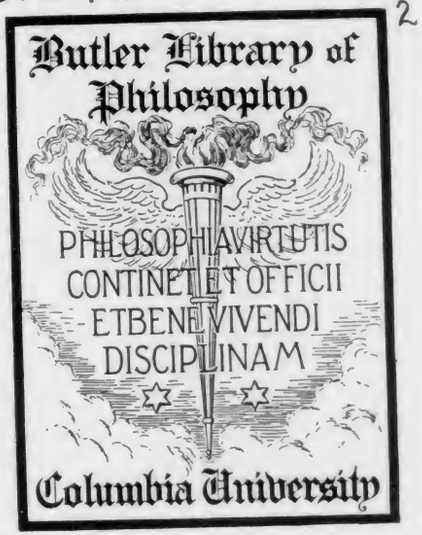
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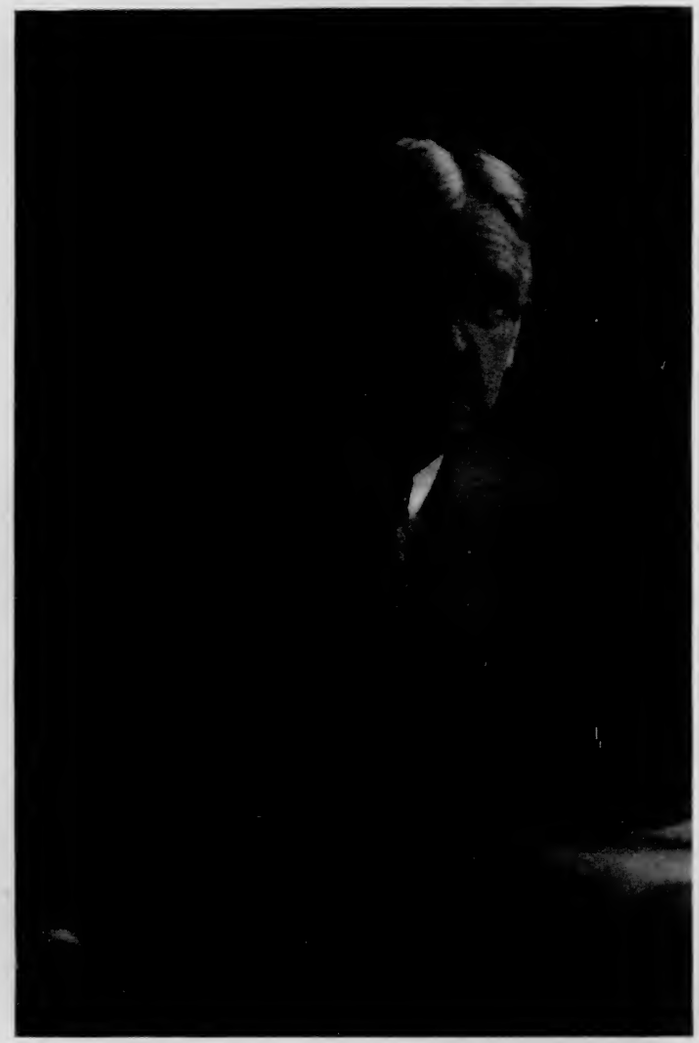

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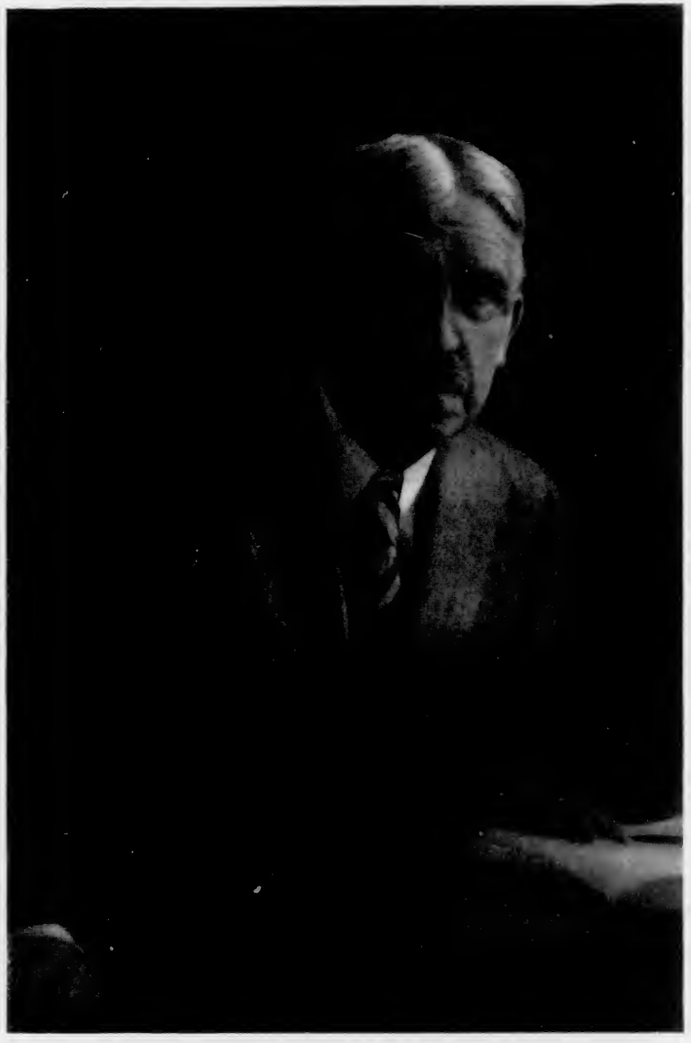

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FROM ABSOLUTISM TO EXPERIMENTALISM

By JOHN DEWEY

Born 1859; Professor of Philosophy, Columbia University, New York City.

FROM ABSOLUTISM TO EXPERIMENTALISM

In the late 'seventies, when I was an undergraduate, "electives" were still unknown in the smaller New England colleges. But in the one I attended, the University of Vermont, the tradition of a "senior-year course" still subsisted. This course was regarded as a kind of intellectual coping to the structure erected in earlier years, or, at least, as an insertion of the key-stone of the arch. It included courses in political economy, international law, history of civilization (Guizot), psychology, ethics, philosophy of religion (Butler's *Analogy*), logic, etc., not history of philosophy, save incidentally. The enumeration of these titles may not serve the purpose for which it is made; but the idea was that after three years of somewhat specialized study in languages and sciences, the last year was reserved for an introduction into serious intellectual topics of wide and deep significance—an introduction into the world of ideas. I doubt if in many cases it served its alleged end; however, it fell in with my own inclinations, and I have always been grateful for that year of my schooling. There was, however, one course in the previous year that had excited a taste that in retrospect may be called philosophical. That was a rather short course, without laboratory work, in Physiology, a book of Huxley's being the text. It is difficult to speak with exactitude about what happened to me intellectually so many years ago, but I have an impression that there was derived from that study a sense of interdependence and interrelated unity that gave form to intellectual stirrings that had been previously inchoate, and created a kind of type or model of a view of things to which material in any field ought to conform. Subconsciously, at least, I was led to desire a world and a life that would have the same properties as had the human organism in the picture of it derived from study of Huxley's treatment. At all events, I got great stimulation from the study, more than from anything I had had contact with before; and as no desire was awakened in me to continue that particular branch of learning, I date from this time the awakening of a distinctive philosophic interest.

The University of Vermont rather prided itself upon its tradition in philosophy. One of its earlier teachers, Dr. Marsh, was almost the first person in the United States to venture upon the speculative and dubiously orthodox seas of German thinking —that of Kant, Schelling, and Hegel. The venture, to be sure, was made largely by way of Coleridge; Marsh edited an American edition of Coleridge's *Aids to Reflection*. Even this degree of speculative generalization, in its somewhat obvious tendency to rationalize the body of Christian theological doctrines, created a flutter in ecclesiastical dovecots. In particular, a controversy was carried on between the Germanizing rationalizers and the orthodox representatives of the Scottish school of thought through the representatives of the latter at Princeton. I imagine—although it is a very long time since I have had any contact with this material—that the controversy still provides data for a section, if not a chapter, in the history of thought in this country.

Although the University retained pride in its pioneer work, and its atmosphere was for those days theologically "liberal"—of the Congregational type—the teaching of philosophy had become more restrained in tone, more influenced by the still dominant Scotch school. Its professor, Mr. H. A. P. Torrey, was a man of genuinely sensitive and cultivated mind, with marked esthetic interest and taste, which, in a more congenial atmosphere than that of northern New England in those days, would have achieved something significant. He was, however, constitutionally timid, and never really let his mind go. I recall that, in a conversation I had with him a few years after graduation, he said: "Undoubtedly pantheism is the most satisfactory form of metaphysics intellectually, but it goes counter to religious faith." I fancy that remark told of an inner conflict that prevented his native capacity from coming to full fruition. His interest in philosophy, however, was genuine, not perfunctory; he was an excellent teacher, and I owe to him a double debt, that of turning my thoughts definitely to the study of philosophy as a life-pursuit, and of a generous gift of time to me during a year devoted privately under his direction to a reading of classics in the history of philosophy and learning to read philosophic

German. In our walks and talks during this year, after three years on my part of high-school teaching, he let his mind go much more freely than in the class-room, and revealed potentialities that might have placed him among the leaders in the development of a freer American philosophy—but the time for the latter had not yet come.

Teachers of philosophy were at that time, almost to a man, clergymen; the supposed requirements of religion, or theology, dominated the teaching of philosophy in most colleges. Just how and why Scotch philosophy lent itself so well to the exigencies of religion I cannot say; probably the causes were more extrinsic than intrinsic; but at all events there was a firm alliance established between religion and the cause of "intuition". It is probably impossible to recover at this date the almost sacrosanct air that enveloped the idea of intuitions; but somehow the cause of all holy and valuable things was supposed to stand or fall with the validity of intuitionalism; the only vital issue was that between intuitionalism and a sensational empiricism that explained away the reality of all higher objects. The story of this almost forgotten debate, once so urgent, is probably a factor in developing in me a certain scepticism about the depth and range of purely contemporary issues; it is likely that many of those which seem highly important to-day will also in a generation have receded to the status of the local and provincial. It also aided in generating a sense of the value of the history of philosophy; some of the claims made for this as a sole avenue of approach to the study of philosophic problems seem to me misdirected and injurious. But its value in giving perspective and a sense of proportion in relation to immediate contemporary issues can hardly be over-estimated.

I do not mention this theological and intuitional phase because it had any lasting influence upon my own development, except negatively. I learned the terminology of an intuitional philosophy, but it did not go deep, and in no way did it satisfy what I was dimly reaching for. I was brought up in a conventionally evangelical atmosphere of the more "liberal" sort; and the struggles that later arose between acceptance of that faith and

the discarding of traditional and institutional creeds came from personal experiences and not from the effects of philosophical teaching. It was not, in other words, in this respect that philosophy either appealed to me or influenced me—though I am not sure that Butler's *Analogy*, with its cold logic and acute analysis, was not, in a reversed way, a factor in developing "scepticism".

During the year of private study, of which mention has been made, I decided to make philosophy my life-study, and accordingly went to Johns Hopkins the next year (1884), to enter upon that new thing, "graduate work". It was something of a risk; the work offered there was almost the only indication that there were likely to be any self-supporting jobs in the field of philosophy for others than clergymen. Aside from the effect of my study with Professor Torrey, another influence moved me to undertake the risk. During the years after graduation I had kept up philosophical readings and I had even written a few articles which I sent to Dr. W. T. Harris, the well-known Hegelian, and the editor of the *Journal of Speculative Philosophy*, the only philosophic journal in the country at that time, as he and his group formed almost the only group of laymen devoted to philosophy for non-theological reasons. In sending an article I asked Dr. Harris for advice as to the possibility of my successfully prosecuting philosophic studies. His reply was so encouraging that it was a distinct factor in deciding me to try philosophy as a professional career.

The articles sent were, as I recall them, highly schematic and formal; they were couched in the language of intuitionalism; of Hegel I was then ignorant. My deeper interests had not as yet been met, and in the absence of subject-matter that would correspond to them, the only topics at my command were such as were capable of a merely formal treatment. I imagine that my development has been controlled largely by a struggle between a native inclination toward the schematic and formally logical, and those incidents of personal experience that compelled me to take account of actual material. Probably there is in the consciously articulated ideas of every thinker an over-weighting of just those things that are contrary to his natural tendencies, an emphasis

upon those things that are contrary to his intrinsic bent, and which, therefore, he has to struggle to bring to expression, while the native bent, on the other hand, can take care of itself. Anyway, a case might be made out for the proposition that the emphasis upon the concrete, empirical, and "practical" in my later writings is partly due to considerations of this nature. It was a reaction against what was more natural, and it served as a protest and protection against something in myself which, in the pressure of the weight of actual experiences, I knew to be a weakness. It is, I suppose, becoming a commonplace that when anyone is unduly concerned with controversy, the remarks that seem to be directed against others are really concerned with a struggle that is going on inside himself. The marks, the stigmata, of the struggle to weld together the characteristics of a formal, theoretic interest and the material of a maturing experience of contacts with realities also showed themselves, naturally, in style of writing and manner of presentation. During the time when the schematic interest predominated, writing was comparatively easy; there were even compliments upon the clearness of my style. Since then thinking and writing have been hard work. It is easy to give way to the dialectic development of a theme; the pressure of concrete experiences was, however, sufficiently heavy, so that a sense of intellectual honesty prevented a surrender to that course. But, on the other hand, the formal interest persisted, so that there was an inner demand for an intellectual technique that would be consistent and yet capable of flexible adaptation to the concrete diversity of experienced things. It is hardly necessary to say that I have not been among those to whom the union of abilities to satisfy these two opposed requirements, the formal and the material, came easily. For that very reason I have been acutely aware, too much so, doubtless, of a tendency of other thinkers and writers to achieve a specious lucidity and simplicity by the mere process of ignoring considerations which a greater respect for concrete materials of experience would have forced upon them.

It is a commonplace of educational history that the opening of Johns Hopkins University marked a new epoch in higher

education in the United States. We are probably not in a condition as yet to estimate the extent to which its foundation and the development of graduate schools in other universities, following its example, mark a turn in our American culture. The 'eighties and 'nineties seem to mark the definitive close of our pioneer period, and the turn from the civil war era into the new industrialized and commercial age. In philosophy, at least, the influence of Johns Hopkins was not due to the size of the provision that was made. There was a half-year of lecturing and seminar work given by Professor George Sylvester Morris, of the University of Michigan; belief in the "demonstrated" (a favourite word of his) truth of the substance of German idealism, and of belief in its competency to give direction to a life of aspiring thought, emotion, and action. I have never known a more single-hearted and whole-souled man—a man of a single piece all the way through; while I long since deviated from his philosophic faith, I should be happy to believe that the influence of the spirit of his teaching has been an enduring influence.

While it was impossible that a young and impressionable student, unacquainted with any system of thought that satisfied his head and heart, should not have been deeply affected, to the point of at least a temporary conversion, by the enthusiastic and scholarly devotion of Mr. Morris, this effect was far from being the only source of my own "Hegelianism". The 'eighties and 'nineties were a time of new ferment in English thought; the reaction against atomic individualism and sensationalistic empiricism was in full swing. It was the time of Thomas Hill Green, of the two Cairds, of Wallace, of the appearance of the *Essays in Philosophical Criticism*, co-operatively produced by a younger group under the leadership of the late Lord Haldane. This movement was at the time the vital and constructive one in philosophy. Naturally its influence fell in with and reinforced that of Professor Morris. There was but one marked difference, and that, I think, was in favour of Mr. Morris. He came to Kant through Hegel instead of to Hegel by way of Kant, so that his attitude toward Kant was the critical one expressed by Hegel himself. Moreover, he retained something of his early Scotch

philosophical training in a common-sense belief in the existence of the external world. He used to make merry over those who thought the *existence* of this world and of matter were things to be proved by philosophy. To him the only philosophical question was as to the *meaning* of this existence; his idealism was wholly of the objective type. Like his contemporary, Professor John Watson, of Kingston, he combined a logical and idealistic metaphysics with a realistic epistemology. Through his teacher at Berlin, Trendelenburg, he had acquired a great reverence for Aristotle, and he had no difficulty in uniting Aristoteleanism with Hegelianism.

There were, however, also "subjective" reasons for the appeal that Hegel's thought made to me; it supplied a demand for unification that was doubtless an intense emotional craving, and yet was a hunger that only an intellectualized subject-matter could satisfy. It is more than difficult, it is impossible, to recover that early mood. But the sense of divisions and separations that were, I suppose, borne in upon me as a consequence of a heritage of New England culture, divisions by way of isolation of self from the world, of soul from body, of nature from God, brought a painful oppression—or, rather, they were an inward laceration. My earlier philosophic study had been an intellectual gymnastic. Hegel's synthesis of subject and object, matter and spirit, the divine and the human, was, however, no mere intellectual formula; it operated as an immense release, a liberation. Hegel's treatment of human culture, of institutions and the arts, involved the same dissolution of hard-and-fast dividing walls, and had a special attraction for me.

As I have already intimated, while the conflict of traditional religious beliefs with opinions that I could myself honestly entertain was the source of a trying personal crisis, it did not at any time constitute a leading philosophical problem. This might look as if the two things were kept apart; in reality it was due to a feeling that any genuinely sound religious experience could and should adapt itself to whatever beliefs one found oneself intellectually entitled to hold—a half unconscious sense at first, but one which ensuing years have deepened

into a fundamental conviction. In consequence, while I have, I hope, a due degree of personal sympathy with individuals who are undergoing the throes of a personal change of attitude, I have not been able to attach much importance to religion as a philosophic problem; for the effect of that attachment seems to be in the end a subornation of candid philosophic thinking to the alleged but factitious needs of some special set of convictions. I have enough faith in the depth of the religious tendencies of men to believe that they will adapt themselves to any required intellectual change, and that it is futile (and likely to be dishonest) to forecast prematurely just what forms the religious interest will take as a final consequence of the great intellectual transformation that is going on. As I have been frequently criticized for undue reticence about the problems of religion, I insert this explanation: it seems to me that the great solicitude of many persons, professing belief in the universality of the need for religion, about the present and future of religion proves that in fact they are moved more by partisan interest in a particular religion than by interest in religious experience.

The chief reason, however, for inserting these remarks at this point is to bring out a contrast effect. Social interests and problems from an early period had to me the intellectual appeal and provided the intellectual sustenance that many seem to have found primarily in religious questions. In undergraduate days I had run across, in the college library, Harriet Martineau's exposition of Comte. I cannot remember that his law of "the three stages" affected me particularly; but his idea of the disorganized character of Western modern culture, due to a disintegrative "individualism", and his idea of a synthesis of science that should be a regulative method of an organized social life, impressed me deeply. I found, as I thought, the same criticisms combined with a deeper and more far-reaching integration in Hegel. I did not, in those days when I read Francis Bacon, detect the origin of the Comtean idea in him, and I had not made acquaintance with Condorcet, the connecting link.

I drifted away from Hegelianism in the next fifteen years; the word "drifting" expresses the slow and, for a long time,

imperceptible character of the movement, though it does not convey the impression that there was an adequate cause for the change. Nevertheless I should never think of ignoring, much less denying, what an astute critic occasionally refers to as a novel discovery—that acquaintance with Hegel has left a permanent deposit in my thinking. The form, the schematism, of his system now seems to me artificial to the last degree. But in the content of his ideas there is often an extraordinary depth; in many of his analyses, taken out of their mechanical dialectical setting, an extraordinary acuteness. Were it possible for me to be a devotee of any system, I still should believe that there is greater richness and greater variety of insight in Hegel than in any other single systematic philosopher—though when I say this I exclude Plato, who still provides my favourite philosophic reading. For I am unable to find in him that all-comprehensive and overriding system which later interpretation has, as it seems to me, conferred upon him as a dubious boon. The ancient sceptics overworked another aspect of Plato's thought when they treated him as their spiritual father, but they were nearer the truth, I think, than those who force him into the frame of a rigidly systematized doctrine. Although I have not the aversion to system as such that is sometimes attributed to me, I am dubious of my own ability to reach inclusive systematic unity, and in consequence, perhaps, of that fact also dubious about my contemporaries. Nothing could be more helpful to present philosophizing than a "Back to Plato" movement; but it would have to be back to the dramatic, restless, co-operatively inquiring Plato of the Dialogues, trying one mode of attack after another to see what it might yield; back to the Plato whose highest flight of metaphysics always terminated with a social and practical turn, and not to the artificial Plato constructed by unimaginative commentators who treat him as the original university professor.

The rest of the story of my intellectual development I am unable to record without more faking than I care to indulge in. What I have so far related is so far removed in time that I can talk about myself as another person; and much has faded, so that a few points stand out without my having to force them into

the foreground. The philosopher, if I may apply that word to myself, that I became as I moved away from German idealism, is too much the self that I still am and is still too much in process of change to lend itself to record. I envy, up to a certain point, those who can write their intellectual biography in a unified pattern, woven out of a few distinctly discernible strands of interest and influence. By contrast, I seem to be unstable, chameleon-like, yielding one after another to many diverse and even incompatible influences; struggling to assimilate something from each and yet striving to carry it forward in a way that is logically consistent with what has been learned from its predecessors. Upon the whole, the forces that have influenced me have come from persons and from situations more than from books—not that I have not, I hope, learned a great deal from philosophical writings, but that what I have learned from them has been technical in comparison with what I have been forced to think upon and about because of some experience in which I found myself entangled. It is for this reason that I cannot say with candour that I envy completely, or envy beyond a certain point, those to whom I have referred. I like to think, though it may be a defence reaction, that with all the inconveniences of the road I have been forced to travel, it has the compensatory advantage of not inducing an immunity of thought to experiences—which perhaps, after all should not be treated even by a philosopher as the germ of a disease to which he needs to develop resistance.

While I cannot write an account of intellectual development without giving it the semblance of a continuity that it does not in fact own, there are four special points that seem to stand out. One is the importance that the practice and theory of education have had for me: especially the education of the young, for I have never been able to feel much optimism regarding the possibilities of "higher" education when it is built upon warped and weak foundations. This interest fused with and brought together what might otherwise have been separate interests—that in psychology and that in social institutions and social life. I can recall but one critic who has suggested that my thinking has been too much permeated by interest in education. Although

a book called *Democracy and Education* was for many years that in which my philosophy, such as it is, was most fully expounded, I do not know that philosophic critics, as distinct from teachers, have ever had recourse to it. I have wondered whether such facts signified that philosophers in general, although they are themselves usually teachers, have not taken education with sufficient seriousness for it to occur to them that any rational person could actually think it possible that philosophizing should focus about education as the supreme human interest in which, moreover, other problems, cosmological, moral, logical, come to a head. At all events, this handle is offered to any subsequent critic who may wish to lay hold of it.

A second point is that as my study and thinking progressed, I became more and more troubled by the intellectual scandal that seemed to me involved in the current (and traditional) dualism in logical standpoint and method between something called "science" on the one hand and something called "morals" on the other. I have long felt that the construction of a logic, that is, a method of effective inquiry, which would apply without abrupt breach of continuity to the fields designated by both of these words, is at once our needed theoretical solvent and the supply of our greatest practical want. This belief has had much more to do with the development of what I termed, for lack of a better word, "instrumentalism", than have most of the reasons that have been assigned.

The third point forms the great exception to what was said about no very fundamental vital influence issuing from books; it concerns the influence of William James. As far as I can discover, one specifiable philosophic factor which entered into my thinking so as to give it a new direction and quality, it is this one. To say that it proceeded from his *Psychology* rather than from the essays collected in the volume called *Will to Believe*, his *Pluralistic Universe*, or *Pragmatism*, is to say something that needs explanation. For there are, I think, two unreconciled strains in the *Psychology*. One is found in the adoption of the subjective tenor of prior psychological tradition; even when the special tenets of that tradition are radically criticized, an under-

lying subjectivism is retained, at least in vocabulary—and the difficulty in finding a vocabulary which will intelligibly convey a genuinely new idea is perhaps the obstacle that most retards the easy progress of philosophy. I may cite as an illustration the substitution of the "stream of consciousness" for discrete elementary states: the advance made was enormous. Nevertheless the point of view remained that of a realm of consciousness set off by itself. The other strain is objective, having its roots in a return to the earlier biological conception of the *psyche*, but a return possessed of a new force and value due to the immense progress made by biology since the time of Aristotle. I doubt if we have as yet begun to realize all that is due to William James for the introduction and use of this idea; as I have already intimated, I do not think that he fully and consistently realized it himself. Anyway, it worked its way more and more into all my ideas and acted as a ferment to transform old beliefs.

If this biological conception and mode of approach had been prematurely hardened by James, its effect might have been merely to substitute one schematism for another. But it is not tautology to say that James's sense of life was itself vital. He had a profound sense, in origin artistic and moral, perhaps, rather than "scientific", of the difference between the categories of the living and of the mechanical; some time, I think, someone may write an essay that will show how the most distinctive factors in his general philosophic view, pluralism, novelty, freedom, individuality, are all connected with his feeling for the qualities and traits of that which lives. Many philosophers have had much to say about the idea of organism; but they have taken it structurally and hence statically. It was reserved for James to think of life in terms of life in action. This point, and that about the objective biological factor in James's conception of thought (discrimination, abstraction, conception, generalization), is fundamental when the rôle of psychology in philosophy comes under consideration. It is true that the effect of its introduction into philosophy has often, usually, been to dilute and distort the latter. But that is because the psychology was bad psychology.

I do not mean that I think that in the end the connection of

psychology with philosophy is, in the abstract, closer than is that of other branches of science. Logically it stands on the same plane with them. But historically and at the present juncture the revolution introduced by James had, and still has, a peculiar significance. On the negative side it is important, for it is indispensable as a purge of the heavy charge of bad psychology that is so embedded in the philosophical tradition that is not generally recognized to be psychology at all. As an example, I would say that the problem of "sense data", which occupies such a great bulk in recent British thinking, has to my mind no significance other than as a survival of an old and outworn psychological doctrine—although those who deal with the problem are for the most part among those who stoutly assert the complete irrelevance of psychology to philosophy. On the positive side we have the obverse of this situation. The newer objective psychology supplies the easiest way, pedagogically if not in the abstract, by which to reach a fruitful conception of thought and its work, and thus to better our logical theories—provided thought and logic have anything to do with one another. And in the present state of men's minds the linking of philosophy to the significant issues of actual experience is facilitated by constant interaction with the methods and conclusions of psychology. The more abstract sciences, mathematics and physics, for example, have left their impress deep upon traditional philosophy. The former, in connection with an exaggerated anxiety about formal certainty, has more than once operated to divorce philosophic thinking from connection with questions that have a source in existence. The remoteness of psychology from such abstractions, its nearness to what is distinctively human, gives it an emphatic claim for a sympathetic hearing at the present time.

In connection with an increasing recognition of this human aspect, there developed the influence which forms the fourth heading of this recital. The objective biological approach of the Jamesian psychology led straight to the perception of the importance of distinctive social categories, especially communication and participation. It is my conviction that a great deal of our philosophizing needs to be done over again from this point

of view, and that there will ultimately result an integrated synthesis in a philosophy congruous with modern science and related to actual needs in education, morals, and religion. One has to take a broad survey in detachment from immediate prepossessions to realize the extent to which the characteristic traits of the science of to-day are connected with the development of social subjects—anthropology, history, politics, economics, language and literature, social and abnormal psychology, and so on. The movement is both so new, in an intellectual sense, and we are so much of it and it so much of us, that it escapes definite notice. Technically the influence of mathematics upon philosophy is more obvious; the great change that has taken place in recent years in the ruling ideas and methods of the physical sciences attracts attention much more easily than does the growth of the social subjects, just because it is farther away from impact upon us. Intellectual prophecy is dangerous; but if I read the cultural signs of the times aright, the next synthetic movement in philosophy will emerge when the significance of the social sciences and arts has become an object of reflective attention in the same way that mathematical and physical sciences have been made the objects of thought in the past, and when their full import is grasped. If I read these signs wrongly, nevertheless the statement may stand as a token of a factor significant in my own intellectual development.

In any case, I think it shows a deplorable deadness of imagination to suppose that philosophy will indefinitely revolve within the scope of the problems and systems that two thousand years of European history have bequeathed to us. Seen in the long perspective of the future, the whole of western European history is a provincial episode. I do not expect to see in my daya genuine as distinct from a forced and artificial, integration of thought. But a mind that is not too egotistically impatient can have faith that this unification will issue in its season. Meantime a chief task of those who call themselves philosophers is to help get rid of the useless lumber that blocks our highways of thought, and strive to make straight and open the paths that lead to the future. Forty years spent in wandering in a wilderness like that

of the present is not a sad fate—unless one attempts to make himself believe that the wilderness is after all itself the promised land.

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LOGIC AND PRAGMATISM

By CLARENCE IRVING LEWIS

Born 1883; Associate Professor of Philosophy, Harvard University, Cambridge, Mass.

LOGIC AND PRAGMATISM

THE most powerful single influence in my intellectual development was an old lady whom I met when I was fifteen. A year or two earlier I had begun a period of the most intense and furious thinking I shall ever experience. The combination of native scepticism and an orthodox upbringing had proved to be an explosive mixture: I had been plunged into doubts and questions which went on and on until I faced the universe with something of the wonder of the first man. The old lady, with compassionate understanding, confessed that she too was a heretic, and after establishing our agreements we went on to the much more enticing matter of our disagreements. Our discussions continued, at intervals, over a period of about two years, at the end of which time I had worked out my own answers to the puzzles which beset me. Some of these, I am sure, must have startled and amused my mentor, but she always agreed solemnly to consider them.

As yet no book on philosophy had even fallen under my eye; but about this time someone must have said the right word, because I remember reading a short history of Greek philosophy (Marshall's, I think), and then, following the references, looking into Ueberweg and the Zeller books. My chagrin was enormous. Much of my philosophy had been anticipated by two gentlemen named Heraclitus and Anaxagoras, and the rest could be fairly duplicated by a judicious eclecticism amongst the other pre-Socratics. It was my first professional disappointment, and quite the most grievous. I read Spencer's *First Principles* also, and found there much of stimulus and much which broadened my horizons—so much, in fact, that I cannot now recall any sense of bewilderment or failure to understand. Very likely I did not comprehend enough of it even to be properly puzzled.

Nothing comparable in importance happened after that until I became acquainted with Kant. I was now safely under academic auspices, and thinking was no longer a lone adventure. Kant compelled me. He had, so I felt, followed scepticism to its inevitable last stage, and laid his foundations where they could not be disturbed. I was then, and have continued to be, impatient of

those who seem not to face the sceptical doubt seriously. Kant attracted me also by his intellectual integrity and by the massiveness and articulation of his structure. The evidence of Kant in my thinking ever since is unmistakable, however little I may achieve the excellences which aroused my youthful admiration.

Of my teachers at Harvard, Royce impressed me most. His ponderous cogency kept my steady attention, even though I never followed to his metaphysical conclusions. James, I thought, had a swift way of being right, but how he reached his conclusions was his own secret. Royce was, in fact, my paradigm of a philosopher, and I was prone to minimize the difference from him of such convictions as I had. It was Royce himself, finally, with my doctor's thesis before him, who pointed out the extent of these differences. He concluded by saying, with his usual dry humour, "I thought you were principally influenced by Perry, but I find he thinks you are principally influenced by me. Between us, we agreed that perhaps this is original."

Royce was also responsible for my interest in logic, or at least for the direction which it took. In 1910–11 I was his assistant in two courses in that subject, and he put into my hands one of the first copies of *Principia Mathematica*, volume i, which came to Cambridge. It is difficult now to appreciate what a novelty this work then was to all of us. Its logistic method was so decidedly an advance upon Schröder and Peano. The principles of mathematics were here deduced from definitions alone, without other assumptions than those of logic. I spent the better part of a year upon it.

However, I was troubled from the first by the presence in the logic of *Principia* of the theorems peculiar to material implication, such as "A false proposition implies any proposition," and "A true proposition is implied by any." The theorems themselves, of course, were familiar; they went back to Peirce and Schröder. But in spite of Peirce's remarks on the topic, I had never taken them seriously, because of their obvious historical origin.

The investigations to which I was moved by this relatively small matter grew in scope and occupied such leisure as I had

for the next six years. Moreover, my thinking on other philosophic topics has been much influenced by these researches, so that I must present, as briefly as possible, the gist of this problem.

Those logicians who were earliest interested in an exact calculus of logic had, all of them, turned first to the relations of concepts or classes. This necessitates a choice—as may be discovered by their mistakes—between the logic of intension and the logic of extension. The relations of class-names in intension are meagre in certain ways, and hardly afford a calculus. Boole founded the algebra of logic, where Leibniz and his Continental successors had failed; principally because Boole interpreted logical relations exclusively in extension. This is no particular merit of Boole's; it seems, rather, to result from the fact that he was born in Great Britain, and knew nothing about his Continental predecessors. British logicians, when really original, have always thought in terms of extension; Continental ones in terms of intension. (Some psychologist with an eye for history ought to investigate this.) So Boole took the universal proposition, "All a is b," to mean, "The class of things a is included in the class b," instead of "The concept a includes or implies the concept b," as a Continental would have done. This extensional point of view requires the special case that if there are no members of the class a, then "All a is b" will hold, regardless of the connotations of a and b. If Boole had any misgivings about this paradox, the arithmetical analogies which he followed in constructing his algebra would have compelled it in any case. The null-class is contained in every class just as $0 < x$, for any positive number x. The converse principle, that any class is contained in the class of "everything," is obvious.

The effect of these limiting cases is to restrict the interpretation of the algebra as a logic of class-terms to the relations of extension. If there are no centaurs, then all the centaurs there are will be Greeks; this is true regardless of the connotation or intension of "centaur" and "Greek." It does not follow that if there *were* any centaurs they *would be* Greeks.

Now Boole discovered a second application of his algebra,

to propositions (more correctly, to propositional functions). For this, he let the symbols *a, b, c, . . .* represent the times when the propositions *A, B, C, . . .* are true. Here the analogue of "All *a* is *b*" is, "Whenever *A* is true, *B* is true," or "*A* implies *B*." If the algebra is to have this second application, the properties of implication must be point for point analogous to those of classes in extension. Hence if $A = 0$—that is, if *A* is always false—then *A* must imply any proposition *B* whatever. And if *B* is always true—that is, if $B = 1$—then *B* must be implied by every proposition. Boole's principal successors, Peirce and Schröder, observed that a proposition, as distinguished from a propositional function, if once true is always true. Hence as applied to propositions, $A = 0$ may be interpreted simply as "*A* is false," and $B = 1$ as "*B* is true."

Thus the application of the algebra to propositions requires these two principles, "A false proposition implies anything," and, "A true proposition is implied by any." In the sense of "implies," which figures in the algebra, "*A* implies *B*" will hold if *A* is false or if *B* is true, and will fail only when *A* is true and *B* is false.

As the analogy with classes shows, this is the case only because the algebra must be restricted to relations of extension. The relation here designated by "implies" is such that a false proposition implies anything, but that throws no light on what it *would* imply if it *were true*.

A meaning of "implies" which is such that the implications of a proposition depend upon its truth or falsity is certainly not the usual one. And the peculiar properties of it are neither important logical discoveries nor absurdities; they are merely the inevitable consequences of a novel denotation for an old and familiar word, long used in common parlance in a different meaning. Thus the calculus of propositions which is historically continuous with Boole is not a calculus of implications, such as those with which logic and deduction generally have always been concerned. This new meaning of "implies" (now called "material implication") should be submitted to some examination before its laws are accepted as a canon of deduction. Such examination was lacking in *Principia*.

Two sorts of problems were before me. First and most obviously: Is there an exact logic, comparable to this extensional calculus, which will exhibit the analogous relations in intension? And is the intensional analogue of material implication the relation upon which deductive inference is usually founded? Second, there were larger and vaguer questions: Could there be different exact logics? If I should find my calculus of intension, it and material implication would be incompatible, on some points, when applied to inference. In that case, in what sense would there be a question of validity or truth to be determined between them? And what criteria could determine the validity of logic, since logic itself provides the criteria of validity used elsewhere, and the application of these to logic itself would be *petitio principii?*

Even the two questions of the first sort could not really be determined in separation from these more general problems. Yet I chose to begin with them. It seemed more promising to argue from exactly determined facts of the behaviour of symbolic systems to conclusions on more general problems than to attempt to reverse this procedure. Logicians who argue from "first principles" to the validity or invalidity of logistic developments find themselves in a weak position, since they dogmatize about a matter which they either have not investigated or have approached with an initial prejudice which commits the *petitio principii* just pointed out.

Leaving, then, the larger questions, I turned to the logistic development of the logic of intension. The results of this investigation may be briefly summarized, since it has been outlined in Chapter V of the *Survey of Symbolic Logic*.[1]

[1] A note should be added concerning the mistaken postulate, which I there assumed for the system of strict implication. This was later pointed out by Dr. E. L. Post, and corrected by me in a note in the *Journal of Philosophy*. In developing the system, I had worked for a month to avoid this principle, which later turned out to be false. Then, finding no reason to think it false, I sacrificed economy and put it in. It was because it thus entered the system so late in its development that I was able, when the mistake was discovered, to correct it in brief space.

The system of strict implication, as printed, contained no postulate logistically incompatible with a material interpretation, such as

The intensional implication relation (or "strict implication" as I called it) gives rise to a calculus as exact as the older logistic systems. It is also more inclusive; when the extensional relations are introduced by definition, it includes the calculus of propositions, as previously developed, as a sub-system. While there are ambiguities about the usual meaning of "implies," and the final issues are such as have seldom been faced at all, on the whole accepted deductive procedures and ordinary logical intuitions accord with strict implication and do not accord with material implication where it diverges.

The only implication relation upon which inference is likely to be based is this intensional or strict implication, for reasons which are fairly obvious. "The proposition A materially implies the proposition B" means precisely, "It is not the case that A is true and B false." This is necessary to ordinary deduction, since otherwise false conclusions could be derived from true premises, but it is not sufficient. To see this, let us inquire how this relation might be verified as holding. In a particular case, it could be verified simply by finding A to be false; but that would mean finding our premise false, so that the conclusion B would ordinarily not be drawn. Sometimes, however, we are interested to draw the inferences from false assumptions. But we should not do this on the basis of material implication, precisely because a false premise materially implies anything and everything. That A materially implies B, *because A is false*, throws no light on the question what A *would* imply if it *were true.*

We might also verify "A materially implies B" in a concrete instance by finding B to be true. But this would mean finding our conclusion to be true. Most frequently in such cases we should not "make the inference" because it would be superfluous. Sometimes, however, we are interested to discover what implies some known fact and what does not—for example, in the testing

$\Sigma p: -p\,.\,-(p < -p)$. To include this would have required a fundamental complication, undesirable in a book addressed to beginning students. I am lately in receipt of a proof, made by a Polish student, M. Wajsberg, that the principle $p < .\, q < p$ is independent of the amended postulates. This covers the same point.

of hypotheses. But a known fact is *materially* implied by *any* hypothesis. Amongst known facts, the material implications of all hypotheses whatever are identical.

Consequently no use can be made of material implication in drawing valid inferences, except in those cases in which the implication can be known to hold for some other reason than that the premise is false or that the conclusion is true. When we inquire how we can know that it is not the case that A is true and B false, without knowing that A is false and without knowing that B is true, the only answer is: By knowing that if A *were* true, B *must be* true; by knowing that the truth of A is inconsistent with the falsity of B; by knowing that the situation in which A should be true and B false is an impossible situation. That is to say, the only case in which any inference could be based on a material implication is precisely the case in which it should coincide (and *be known* to coincide) with the intensional or strict implication of B by A. This amounts to saying that the real basis of the inference is the strict implication. "A strictly implies B" means exactly "The truth of A is inconsistent with the falsity of B."

The so-called "formal implication," "For every x, ϕx materially implies ψx," would coincide, in its general deductive significance, with strict implication provided "For every x" be interpreted to mean, "For every possible or conceivable x." It will be obvious that "For every conceivable x, it is not the case that ϕx is true and ψx false," is a strict implication, differently phrased. But if "For every x" means "For every x that *exists*," then this formal implication represents the ordinary relation of classes, "Every existent thing having the property ϕ has also the property ψ." In *Principia* it is this second interpretation of formal implication which is chosen.

Various technical problems which came to light in the course of these investigations may be omitted here as probably of small interest to the general reader. However, there is one such matter which must be mentioned because it influenced the direction of my thinking outside the field of exact logic. Early in the course of these researches I formed the conviction that all

valid inference, being a matter of intension, rests upon the analysis of meaning. The reasons for this will probably be evident from the foregoing. But the symbolic relations I was dealing with proved to have properties which I had not anticipated, and some of these gave me pause. In particular, while it would not be true, in the system of strict implication, that a merely false proposition implied anything and everything and a merely true proposition is implied by any, it *would* hold that a "necessary" proposition (defined as one which is implied by its own denial) is implied by any, and that a self-contradictory proposition (one which implies its own denial) implies anything.

Had I made a mistake in my assumptions so that the system was out of accord with the properties of analytic inference? Or did the implication relation of ordinary inference have these properties? The latter proved to be the true alternative. There was no way to avoid the principles stated by these unexpected theorems without giving up so many generally accepted laws as to leave it dubious that we could have any formal logic at all.

There were many corroborations. The simplest to set down is as follows: Suppose that a proposition *A* (say, "To-day is Monday") implies another, *B* ("To-morrow is Tuesday"). Then the premise *A*, together with any additional proposition, *C* (say, "Mars is not inhabited"), will likewise imply *B*—that is, "To-day is Monday and Mars is not inhabited" implies "To-morrow is Tuesday." According to another general principle, if two premises give a conclusion, but that conclusion is false while one of the premises is true, the other premise must be false. "All men are mortal" and "Socrates is a man" together imply "Socrates is mortal." Hence if all men are mortal, but Socrates is not mortal, then it follows that Socrates is not a man—that is, we have the rule: If "*A* and *C*" implies *B*, then "*A* but not *B*" implies "not *C*." Applying this rule to our first example, we have: "To-day is Monday and Mars is not inhabited" implies "To-morrow is Tuesday," hence "To-day is Monday, but to-morrow is not Tuesday" implies "Mars is inhabited." In this illustration, the last-mentioned proposition might have been

anything you please without altering anything else. Thus ordinary logical conceptions require that the affirmation of a premise, together with the denial of its consequence (a case of contradiction), will imply anything and everything.

If, then, I had made no mistake, the line of division which marks off that class of propositions which are capable of corroboration by logic alone (necessary propositions) from merely empirical truths, and marks off the impossible or absurd, which can be refuted by logic alone, from merely empirical falsehood, is a division of major importance. Possible and impossible, contingent and necessary, consistent and inconsistent, such categories of intension are independent of material truth, and their distinct nature is founded in logic itself. Moreover, as is easily obvious, all the propositions of logic are truths of intension, and therefore certifiable without reference to the merely factual or empirical.

But I had further doubts. In particular it was not clear that if one should, by inadvertence, set out with incompatible assumptions, there would be no conclusion whatever which one might not draw from them by analytic inference. Nor was it clear that all necessary propositions are analytically derivable from any assumption you please. The facts of the symbolic system were inescapable, and ordinary practice corroborated them; but what did these facts mean?

In part, the answer was a simple one which should have been anticipated. These unexpected properties of implication did not mean that all necessary propositions are analytically derivable from any arbitrarily chosen assumptions whatever; they did represent the fact that implication is not a property of isolated propositions as such, but of systems. Necessary truths are all of them principles of logic, or such as can be certified on grounds of logic alone. Without logic, nothing is derivable from anything; the logic of it is implicit in every deductive system. All necessary propositions are thus, explicitly or tacitly, present in every system, and indeed in every assertion conceived as having logical consequences. Inference is analytic of the system rather than of its separate and bare constituents. If there is any exact logic

which is capable of representing inference as analytic in any other sense, I have never been able to discover a clue to it. I should but be dumbfounded to learn of such to-morrow, but I have followed every lead that has occurred to me, always with negative results.

If inference is analytic of systems, not of propositions in isolation, does this mean that logic compels the acceptance of a coherence theory of truth or the acceptance of that kind of unity of the world which is maintained by logicians of the "modern" or Hegelian school? I turned briefly to the consideration of this possibility—though, I must admit, without any conviction of the necessity of so doing—because while it had become apparent to me that logic required the existence of necessary propositions, it was not so apparent that it required the existence of any truth which is *not* necessary. That the distinction of necessary and contingent must finally fail and all truth reveal itself as necessary, because inference depends on systematic unity, is just what the modern logicians claim. The conclusions which I reached are outlined in a little paper, "Facts, Systems, and the Unity of the World." The thesis that all truths are necessary, and none independent of any other, is hopelessly implausible in the light of certain facts of mathematical systems concerning which nobody (unless it be the modern logicians themselves) has ever entertained a doubt. The whole development of modern geometry, for example, must be somehow invalid if they are right.

The most general and important issue was still before me. I had set out to determine a question of truth between two symbolic systems—material implication and a logic of intensional implication. This had raised the further question what kind of an issue of truth there could be in such a case, and what criteria could determine it. I had found, in commonly accepted practices and principles, corroboration of the characterizing features of strict implication—the distinction of necessary from contingent truth, the classification of logical principles themselves as necessary, and, as a consequence, the status of logic as self-affirming or self-critical, its principles being implied by their own denial.

Could such necessity or self-affirmation be accepted as a final criterion of truth in logic?

There was unmistakable evidence that such was not the case. In the first place, both material implication and strict implication had this character, yet both could not be accepted as stating the truth about what can validly be inferred from what—the truth of logic. Also I found that other and somewhat similar systems could be devised, each of which would have the same general kind of mathematical precision and methodological integrity. These might be called "pseudo-logics" or "metalogics." Though I made no systematic investigation, it became evident that the number of such would be limited only by some criterion of "logistic system" or of the principles of derivation which should be allowed. Such a criterion would itself be an antecedent principle limiting "logical" truth. That such a system might be totally unacceptable as a "true logic" and yet be entirely consistent, and even self-affirming, in its own terms, is due to the curious involution which is peculiar and inevitable to logical truth. "Consistency" is the absence of an "implication": two propositions are consistent when neither implies the negation of the other. Hence if the meaning of "implies"—and consequently the methods of derivation—be allowed to vary, a "queer" logic may be "consistent" or "self-critical" in its own "queer" way.

Thus we revert to the previous question, which now assumes a somewhat complicated form. If formal logic is capable of any exact development at all, then we are confronted with the task of deciding which, amongst various possible and actual logistic systems, is such that its principles state the truth about valid inference. Internal consistency and "self-criticism" are not sufficient criteria to determine a truth which is independent of initial assumptions which are themselves logical in nature. Thus logic cannot test itself—or rather, such test does not prove truth in logic.

It was clear that such a problem has no solution in logic; I was carried beyond logic into the field of epistemology. Many other strands, not mentioned here, were, of course, already woven into my thinking. In particular it had been impressed upon me

that it is possible to take symbolic procedures both too seriously and too lightly. To paraphrase Hobbes: Symbols are our counters; they are the money of fools. But on the other hand, the behaviour of symbolic systems is nothing more nor less than the behaviour of the human mind, using its most characteristic instrument: there is nothing in them which we have not put in ourselves, but they teach us inexorably what our commitments mean.

Also, at just this time it became my duty and privilege to turn over the numerous unpublished papers of Charles Peirce. Though I was not specially conscious of it, this was perhaps the means of stirring up old thoughts of the time when I had listened to James, and reminding me also of what Royce used to call his "absolute pragmatism." Again, I had long been attracted to certain theses of Dewey's logic—if only he would not miscall "logic" what is rightly a much wider thing, the analysis of the constructive thought-process! The study of exact logic itself had revealed unmistakably that in every process of reasoning there must be an extra-logical element. This cannot but be so, since from any premise or set of premises whatever an infinite number of valid inferences can be drawn. (This is an immediate consequence of Poretsky's laws.) What is called "*the* conclusion" must be selected from this infinity by psychological obviousness or by some purpose or interest; certainly logic does not dictate it. The *direction* of thought inevitably belongs, then, to such an extra-logical factor. Finally, Peirce's "conceptual pragmatism," turning as it does upon the instrumental and empirical significance of concepts rather than upon any non-absolute character of truth, was at some points consonant with my own reflections where James and Dewey were not.

Whatever it was that turned my thoughts in this direction, at any rate I began to see that the principles of logic will answer to criteria of the general sort which may be termed pragmatic, and that where empirical verification is not in point, and logical "necessity" itself is not sufficient, no other kind of criterion can in any sense be final.

It had become apparent from my little experiments with strange "logics" that two minds which followed different systems

in their modes of inference need not be unintelligible to one another—that, in fact, they might be so related that when their premises were common neither (outside of logic itself) would ever reach a conclusion which the other must repudiate as false. But, as between two such, the road from premise to conclusion would be more or less direct, more or less impeded. Fundamental psychological bent might here dictate a choice. Or again, if the general course of experience were other than it is—if, for example, all processes in nature should be reversible—then, although no different choice of modes of inference would be dictated, a different "logic" would apply with more facility. Thus the ultimate ground of accepted logical principles, as against other self-consistent modes, might be criteria of convenience (a poor word, but the best I can think of), somewhat like those which Poincaré suggested as determining our choice of Euclidean geometry.

This thesis, by itself, seems implausible and highly paradoxical; the stronghold of pragmatism supposedly lies in the empirical; logic is the citadel of rationalism. Nevertheless I became more and more convinced that this was right. Pragmatism, as ordinarily understood, seems to take things wrong end on; it is the element which mind contributes, in truth and knowledge, which may be pragmatic; the empirical brute fact of the given is absolute datum. Logic contains no material truth; it is independent of the given precisely because it dictates nothing whatever with regard to the content of experience, but determines only the mind's mode of dealing with it. This thought suggested others, which soon came to keep it company and mitigate the paradoxical air which it exhibited in isolation.

A variety of other problems, mainly in the theory of knowledge, had been in my mind for the past few years. Some of them were closely related to those already suggested as growing out of logic. I now sat down (this was in 1921) to the first draft of something concerning these, which I projected as "Studies in Logic and Epistemology." These will never see the light. They grew from one box to two, and then to several. But the yeast of the newly awakened pragmatic conceptions was working too

strongly. My thought changed and widened as I attempted to formulate it, and the result, instead of moving toward some unity of subject and literary coherence, spread in widening circles through the whole field of philosophy. It was a most satisfactory period to me personally, because in the course of it I squared my account with many problems and brought them into touch with one another. What I shall venture to call "conceptualistic pragmatism" proved to be, for me, the key that opened many doors. But my notes I put away, except for a relatively small portion, and concentrated upon certain closely related topics which I found myself particularly interested to develop further. The attempt to outline some of these is the remaining task of this paper.

Logic, and that which is certifiable on logical grounds alone, constitutes the a priori element in knowledge. The Kantian cross-classification, by which *synthetic* judgments a priori become the foundations of science, has more and more clearly been proved to be without foundation, as mathematics and exact science have developed. Mathematics has been shown to be capable of purely logical development, by analysis alone, and without recourse to any synthetic element, such as geometric constructions, which represent an appeal from pure conception to intuition. *Principia Mathematica* represents the final stage of the movement in this direction: we see here the deductive development of mathematics merely from the logical analysis (definition) of the mathematical concepts. There is and must be a synthetic element in judgment about the *applications* of mathematics, about real space, or about concrete collections of things. At the same time that mathematics becomes purely logical and analytic, it becomes abstract. Which of the various abstract geometrics applies to space becomes a separate and extra-mathematical question, and, as Poincaré and relativity have shown, one which is to be determined either upon empirical grounds; in which case the answer is probable only, or by some pragmatic choice, or by some interplay between these two.

Hume was right in his somewhat wavering conviction that the truths of mathematics represent necessary connections of

ideas, and likewise right that this by itself does not prove any necessary connection of matters of fact. The line between the a priori and the a posteriori coincides with the division between conceptual and empirical; and it likewise coincides with the distinction between what mind itself contributes or determines and what is given as datum of sense.

A priori truth is independent of experience because it is purely analytic of our conceptual meanings, and dictates nothing to the given. Logic, mathematics, and in general whatever has structure and order and system, may be developed in abstraction from all consideration of the empirical by purely logical analysis. It depends upon nothing but its own conceptual integrity for that kind of truth which is possible to abstract systems.

Such a priori truth is not assertive of material fact, but definitive. This is the clue to many problems. In the first place, it exhibits clearly the sense in which we can make stipulations applicable to experience but independent of its content. In the absence of definitive criteria, experience would be unintelligible; these are prerequisite to truth and knowledge, though not to mere givenness. The definitive principle is "necessary" truth; it cannot be false; it is prerequisite to intelligibility; it must be taken in advance of the particular experience; it dictates nothing as to the content of the experience.

In the second place, this solves the problem of the criterion between what mind contributes in truth and knowledge and what is independent of the mind. How should we know what mind does, if mind could do no different? I discover what I do solely by the difference in what ensues when I refuse to do, or do differently. If there should be immutable and "ungetoverable" modes of intuition or of thought, the mind could never discover that these belonged to itself and were not characters of the independent real; they would be absolute data, flatly given in experience, and the individual would find them as he finds his ears.

There must, then, in some sense or other, be conceivable alternatives to what is a priori. In those modes of our own intellectual activity which are exhibited in the criteria supplied by

definitive principles, there are such alternatives. A definition may be laid down in one or another way; we classify and order and understand as we ourselves determine. Once our exact concepts are taken, the unfolding of them is an absolute truth: there is no alternative about that (unless we ascend to some higher choice of alternative modes of deductive order itself). But what concepts we shall formulate, and what we shall apply, admits of choice. The mind approaches the chaos of experience with its own intellectual instruments, which are independent of the given as the given is of them. Truth and knowledge represent the meeting of these two. That the particular truth and knowledge may reflect, in some part, a choice of such instruments, that the net of understanding may be stretched across the given in terms of one or another reference system of conceptual order, is a matter which might well be illustrated at some length, but will probably be evident without such exemplification. And the sense in which the truths of experience will be, on one side, determined by the presence of such definitive conceptual order, though the content of the given is not thus determined, will likewise be clear. The whole trend of exact science serves strongly to enforce the fact of this presence, throughout all knowledge, of an a priori element which enters through the simple fact that experience never supplies its own conceptual interpretation, but that conceptual systems, amongst which there may be possible choice, serve as criteria of such interpretation, without imposing any limit on the empirical content. That in the presence of such alternative systems of order, pragmatic criteria, which may reflect on the one side human bent and interest, and on the other a facility determined by the general character of what is presented, will have their place in fixing the truths of experience, needs no special demonstration.

If, however, all truth which can be certain in advance of the experience to which it applies is of this purely analytic and definitive sort, then we might be led to remark that such abstract a priori truth tells us nothing of the nature of reality beyond our own minds, and is significant only of our own consistency of thought. This conclusion would be a mistaken one; paradoxical

as it may sound, we can predict the nature of reality without prescribing the character of future experience. What the mind meets in experience is not independent *reality*, but an independent *given*; the given is not, without further ado, the real, but contains all the content of dream, illusion, and deceitful appearance.

In fact, the criteria of reality represent a peculiarly illuminating example of the a priori. The word "real" has a meaning, and represents a definite conception which, when applied to the content of experience, leads to the interpretation of this content sometimes as "real," sometimes as "unreal." The formulation of the criteria of the real constitutes a merely analytic or definitive statement, representing our interpretative attitude. Such criteria of reality can neither be supplied by experience (since direct generalization from an unsorted experience, not already classified as real, would not serve) nor can experience invalidate them. Whatever in experience does not conform to the criteria of reality is automatically thrown out of court.

We can and must prescribe the nature of reality. We cannot prescribe the nature of the given. The paradox of this is mitigated somewhat when we observe that the word "real" is systematically ambiguous. "Reality" is of different sorts, physical, mental, mathematical—the easily named categories do not cover the easily recognized distinctions. A mirror-image, for example, is its own particular kind of reality, neither "physical" nor "mental," as is also a mirage and "appearances" in general. Each category of reality has its own peculiar criteria, and what is unreal in one sense will be real in some other. *Any* content of given experience will be real in some category or other—will be that kind of reality which is ascribed to it when it is "correctly understood." The categories are neither a Procrustean bed into which experience is thrust nor concepts whose applicability depends on some pre-established harmony between the given and the mind. Rather they are like the reference system which the mathematician stretches through all space and with respect to which whatever positions and motions are there to be described will inevitably be describable. Categorial criteria are neither insignificant and verbal tautologies nor empirical

prophecies, but exhibit definitive criteria of intelligent classification and interpretation.

The content of a properly conceived metaphysics is the analytic truths which exhibit the fundamental criteria and major classifications of the real; it is definitive of "real"-ity, not descriptive of the universe *in extenso*. In fact, all philosophy has for its task such analytic depiction of the a priori—to define the good, the right, the true, the valid, and the real.

It will be evident that the absoluteness of such a priori principles, whenever and wherever they are held, is entirely compatible with their historical alteration, just as modes of classification or alternative reference systems, expressible in definitive principles or initial prescriptions, would be absolute while adhered to, but might be subject to considerations of usefulness and to historical change. The assurance of perpetuity for our categories is no greater than the assurance that our basic human nature and the broad outlines of experience will never alter. There is an eternal truth about our abstract concepts—the given is absolute datum; but the chosen conceptual systems applied to the interpretation of the given are subject to possible change. In the field of metaphysical concepts particularly, such change would seem to be a fact—as the history of such concepts as "matter," "mind," and "cause," bears witness.

The categories differ in no wise from concepts in general except in degree of comprehensiveness and fundamental character. Every concept whatever exhibits criteria of its own little kind of reality. In so far as experience is intelligible and expressible only when grasped in some framework of conceptual interpretation, this a priori element of the definitive is all-pervasive.

It is the conceptual order of experience alone which is communicable or expressible. The given, apart from such conceptual interpretation, is ineffable. If, so to speak, one sensory quality could be lifted out of the network of relations in which it stands and replaced by another, the æsthetic character of experience might be altered, but everything which has to do with knowledge and with action would remain precisely as before. Community of thought and knowledge requires community of concept or of

relational pattern, but if there should be idiosyncrasies of sense which do not affect discrimination and relation, these would be immaterial to our common understanding and co-operation. In fact, in the face of all those *verifiable* differences of sense which are evidenced by our different powers of discrimination, we possess a common understanding and a common reality through the social achievement of common categories and concepts. When the vast and impressive institution of human education—in its wider sense—is remarked, the assumption that such community is simply native or ready-made is seen to be superfluous. My world is my intellectual achievement; our common world, a social one. The frequent objection of the sceptic, that knowledge is implausible in view of the subjectivity of sense, is an *ignoratio elenchi*.

Knowledge grasps conceptual structure or order alone. It was Berkeley who, almost without noting it himself, first phrased this nature of our knowledge. One idea is "sign of" another in the order of nature. If it be a reliable sign—that is, if it bear constant and orderly relationships—one empirical *quale* is as good as another to serve this function of cognition. Knowledge of the external world consists of relations between one item of experience and another, not in the content of experience somehow matching the quality of an external real. Such qualitative coincidence of idea and object—if the notion means anything—would be extraneous to knowledge. This conclusion is quite independent of idealism.

There are not two kinds of knowledge; one of principles or relations, expressible in propositions, and another which we have by mere presentation of the object. The conceptual interpretation of the given is the implicit prediction of other possible experience. As Mr. Whitehead has pointed out, no object can be known without reference to some temporal spread. My knowledge of the object is not the mere having of this presentation, but the implicit prediction of the eventuation of other experience continuous with this. What is thus predicted is not at the moment verified, but it must be verifiable if the interpretative concept is veridically applicable. The mere naming of this thing I see as

"desk" predicts eventualities of a specific sort, which, if they should fail to be realized, would lead to the repudiation of the concept "desk" (or perhaps even of "physical reality") as inapplicable to this which I see. The knowledge of any object transcends its given presentation and grasps a structure of experience. Without order, there can be no *thing*, no experience of *reality*. This, in brief, is the deduction of the categories.

That *if* this be a desk, it *will be* thus and so, is an analytic consequence of the concept "desk," not subject to any falsification by experience. That any given "this" is really a desk, is theoretically not completely certain. Thus there is an a priori element which is all-pervasive in knowledge and prescriptive of reality. Yet all empirical truth, without exception, is probable only.

One further note I should like to make in closing. As the word "knowledge" has been used above, it is narrowed somewhat from its usual meaning. It comprises what have sometimes been called the "truths of description" which, as it is here conceived, depend exclusively upon conceptual order. It excludes "truths of appreciation," the æsthetic quality of the given, and all that depends upon sympathy and upon that communion of minds which requires coincidence of immediate experience. Evaluation can hardly be indifferent to the quality of the given. Nor can the basis of ethics be laid without reference to the felt character of experience in another mind. And the religious sense, if it is to take reality as the matrix of human values, will likewise transcend the interests of knowledge in this restricted sense. There is, then, a line of division between such interests and cognition of the type of science. And it is suggested that the foundation of these, not being found in knowledge alone, may rest upon some postulate.

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PROBLEMATIC REALISM

By J. LOEWENBERG

Born 1882; Professor of Philosophy, University of California, Berkeley, California.

PROBLEMATIC REALISM

PHILOSOPHICAL labels are necessary evils. How get on without them? How distinguish one doctrine from another? But there are two kinds of labels. Lazy labels—the felicitous expression is Professor Palmer's—are those which we affix to beliefs not our own: they are inert names for endlessly variable shades of opinion. Such naming is simply pigeon-holing. It is a facile way of lumping together under a single rubric incomparable visions and theories. Philosophers not unjustly resent having their doctrines so indolently amalgamated from without. Witness, for instance, the notorious disavowal by modern idealists of the epithet "Hegelian." The names under which we epitomize our own philosophies we take more seriously. They are creative labels. They are scrupulously designed to convey what is indigenous and characteristic. They are part and parcel of the creative activity to the products of which they are attached.

The label by which I here designate my own philosophic beliefs must be understood as intimately bound up with them. It has been chosen with care to express a fresh variation of an ancient doctrine. Realism is certainly venerable; and even those who qualify it as "new" are not ignorant of its antiquity. Realism was not born with "New Realism." The adjective "new" is here either pretentious or factitious. Its usurpation by a particular version of realism is to be deplored and resented. Novelty is a feature belonging to every genuine variant of a general theme.

The variation of realism which I label "problematic" shares with the variations distinguished by other names a central theme. What is the common thread that runs through the manifold forms of realism? To this question there is unfortunately no unambiguous answer. But when technical guises are laid aside all realism appears to consist in the conviction that reality is prior to the knowledge of it, and that consequently mind has a status which is derivative and not pivotal. It is misleading, I think, to state the case for realism by saying that reality is independent of being known. Why is reality independent of the

cognitive relation? Is it because the cognitive relation is a *relation* or because it is *cognitive*? And what is independence? Independence is either too equivocal or too uncompromising a term through which to express the cardinal principle of realism. Every philosophy, to be philosophy at all, must rest on the supposition that between being and knowing there is some linkage. What distinguishes realism from other views is not insulation but emancipation of being from knowing. What is insulated is isolated and thus disconnected; what is emancipated is merely liberated, but not deprived of relation. Not in extruding from reality all relations consists the work of realism, but rather in investing it in respect to knowledge with a particular kind of relation, the relation of *priority*.

I share, then, the general view common to all forms of realism—namely, that reality is prior to knowledge, and hence to mind, if knowledge is impossible in the absence of mind. But what are we to understand by reality? And what by knowledge? To these two questions—surely second to few in philosophic importance—my version of realism hazards an answer.

I hold, for various reasons soon to be mentioned, that reality is a substantive qualifiable by human knowledge as problematic, if the qualification is to be regarded as final. In other words, the only adjective *ultimately* descriptive of reality is the adjective problematic. To this belief—big with implications—I have come by different routes. It is, of course, not possible to retrace them here in detail. I can only indicate a few salient landmarks.

One route leading me to Problematic Realism lies in following the ontological consequences of scientific methodology. Scientific knowledge is surely knowledge of the real, and the only kind of knowledge which is controlled by rigorous methods of observation and experiment. Hence the solidity and solidarity of scientific achievements. The results of scientific investigation are public, attained though they are through the toil or genius of individual men. It is hardly worth mentioning that no fact is a scientific fact, even though but one individual may claim the glory of having observed it for the first time, if it is inaccessible to observation by other individuals competent to observe it. And

similarly no inference about the nature of things is valid, however justified in the light of numerous and meticulous observations, if it is contradicted by later discoveries of fresh and relevant data. Scientific observations and generalizations are seemingly handicapped by the very qualities to which they owe social prestige and logical exactitude. For if all that in science is certain is the result of actual verification, and if all that in science is established is modifiable through discovery of facts as yet unfathomed, then the limits of science—limits variable and extensible—are the limits of verification and discovery. As long as the need for verification is perennial, and as long as the unknown regions of fact are still undiscovered, an ineradicable scepticism must always cleave to the work of science. The method of science seems to be a method either of allaying or of confirming ubiquitous suspicion—suspicion that what for the nonce is certain and established may require revision and reconstruction. And the instruments through which such suspicion is either weakened or fostered are *endless* verification and *indefatigable* discovery. It would, however, be wrong to conclude that scientific suspicion which engenders the twin demands for *insatiable* verification and discovery involves merely scepticism of metaphysics. Science is indeed radically opposed to metaphysics, in so far as the latter is charged with the office of furnishing a description of the universe so final that further verification becomes otiose and further discovery negligible. Finality of this sort is obviously incompatible with the spirit and method of science. Yet metaphysical finality of another kind is clearly involved in the enterprise of science. The view that reality is such as to suffer no judgment concerning its nature to stay continual verification and discovery is itself a final view. I call this view, not scepticism of metaphysics, but metaphysics of scepticism. Suspicion of finality, one of the most characteristic traits of science, is born of the ontological insight that reality is full of surds—surds that pale the brilliance of all scientific achievements. In the last analysis, it is the metaphysical conception of the universe as the *inexhaustible* source of problems which forbids scientific assertions the enjoyment of security and completeness.

Another route towards Problematic Realism proceeds from the very idea of the "ultimate," which science is said to shun and which metaphysics is supposed to court. What are we to understand by the ultimate, a notion so very vague yet so much in vogue? It is ordinarily used with reckless inattention to the conflicting meanings it harbours. I find it employed as a synonym for notions bewildering in number and variety. Here are some of its equivalents—the absolute, the unconditioned, the inexplicable, the indescribable, the indefinable, the indiscernible, the fundamental, the basic, the primary, the final, the indubitable, the irreducible. Are these terms on a parity? Are they really synonymous? Apart from the obscurity of it, due to too much opulence of meaning, the ultimate as commonly employed suffers from incurable stiffness or rigidity. It is a state or condition or act or category so inelastic that any stretching or straining beyond it is assumed to be for ever precluded. And of the ultimate as something "unstretchable" philosophers are supposed to be the traditional champions and custodians. But there are two ways of regarding anything as unmalleable. The being or constitution of the thing itself may be such as to prevent stretching, and if so, then it is what I call *ontologically* ultimate; or it may be inflexible simply for our thought, in the sense that it defies further reduction or analysis or definition, in which case it is what I designate as *cognitively* ultimate. In metaphysics, all sorts of things have paraded as ultimate, either because of their own irrefragable nature or because of our inability to stretch our imagination beyond them. Atoms, monads, essences, events, space-time, experience—need I mention other "unstretchables"?—have been proclaimed by different philosophers as the irresilient constituents of being or the unbreakable terms of thought. Unfortunately, what in one system of metaphysics is viewed as ontologically or cognitively tenacious is in another considered constitutively or logically brittle. From system to system the ultimate changes its content. This is manifestly an intolerable situation. It can be relieved only by the recognition of what I venture to call *the elastic ultimate.*

The elasticity of the ultimate is certainly demanded by the

scientific method. Every science is able to reach something "unstretchable," when it pushes analysis as far as it will go, and when its inferences are such as to withstand the tests of consistent thought. Within the limits of human observation and generalization science is competent to traffic in things and ideas relatively irresilient; the accumulated evidence is for the time being so overwhelming in their favour that, if there is to be any science at all, no doubt can be entertained as to their *present* right to claim finality. But the state of the "unstretchables" in any particular science is a limiting state; if and when we have in any given science reached the limits of observation and inference we have reached what is inelastic *pro tempore*. The element of suspicion, such an essential part of the scientific method, casts its shadow upon everything. There is no guarantee that what now appears irrefragable will enjoy this privilege in perpetuity. The absolute to-day may become relative to-morrow. What at present is rigid and fixed may in the future, through continual analysis and experiment, exhibit astonishing plasticity. It must thus be said that science both vindicates and repudiates the ultimate—it needs it as an elastic concept, but it shuns it as something inherently unstretchable. The elastic ultimate, as furnished by science, is a singular instance of what I mean by the real which is problematic and the problematic which is real. For such an ultimate is describable by the two adjectives simultaneously and interchangeably: it is real, since it represents the actual limit of scientific verification and discovery; and it is problematic, since a later limiting state of observation and inference may render precarious the "ultimates" now in force. That the ultimate is but ultimate *in transitu*—that it has movable boundaries in the extension of which science is continually engaged—is indeed a powerful argument in favour of Problematic Realism.

Another way pointing in its direction lies in considering what is meant by the "given." What are we to understand by a concept doing such yeoman's service for science and philosophy? It is certainly a fundamental term, but is it unequivocal? I find the "given" as bewildering a notion as the notion of the "ultimate."

And here, too, we may profit by discerning the elastic from the inelastic uses of it. For the given may mean either that with which inquiry starts or that in which it terminates. It is important to render distinct these two meanings by giving them separate names. Accordingly, by "pre-analytical" I designate whatever functions as a source of analysis, and by "post-analytical" whatever is discovered as the limit of analysis. It is manifestly bootless to appeal to the given unless we distinguish in the most explicit manner between what is given *for* analysis and what is given *through* analysis. By a strange equivocation the given, without forfeiting the sense of something "primitive," is in philosophy frequently identified, not with that from which the *investigation* takes its start, but with the simple constituents to which the *investigated object* may by analysis be reduced. Givenness, in short, is viewed as belonging to post-analytical entities and relations, those at which analysis is obliged to halt, rather than to a pre-analytical situation inaugurating and prompting analysis. No such equivocation can be laid at the door of science. All scientific data are pre-analytical: they are literally points of departure, initial states or stages in any investigation. The given in science signifies any fact, event, situation, or circumstance capable of enticing inquiry and eliciting the operation of the scientific method. Thus democratic and accommodating is the scientific use of the given. Furthermore, if we distinguish between the object demanding description and the terms employed in describing it, the scientific datum signifies not that *by* which it is described, but rather that *to* which scientific description addresses itself. When a more adequate study of any "given situation" necessitates a different description of it, what happens is that we simply exchange one set of terms for another; the datum, however fluctuating the descriptive terms, is the same original situation at the behest of which the descriptive process is set in motion. It follows that the scientific datum, connoting for the most part something supple and provisional, coincides essentially with what we ordinarily mean by a "problem." The given from which scientific inquiry takes its start is neither an unquestioned fact nor the indubitable knowledge of it. As a whole or as an incident

in a wider context, the given is for science a continual challenge, always remaining "pre-analytical," in the sense of never condemning as superfluous the task of more searching analysis.

What a contrast is the philosophic use of the given! The given, as, for instance, it figures in epistemology, is never a relative starting-point of analysis, but rather its absolute halting-place. The given in which analysis terminates is the termination of the analytical process itself. Although disclosed by the solvent work of analysis, the given once revealed is that which compels analysis to draw its last breath. For the given is ultimate, and the ultimate is in philosophy the unstretchable. Post-analytical data, unlike their pre-analytical cousins, are thus essentially aristocratic: they are privileged beings of an exclusive order. The data, which in epistemology the discerning work of critical analysis brings to light, are alleged to enjoy peerless predicates, such as "pure," "irreducible," "original," "immediate," "indubitable." These evidently are not the tokens of our plebeian objects of perception. It thus follows that the given, standing as it does for a restricted and favoured class of beings, designates the elements to which our complex objects may be reduced and not the reducible complexes themselves. The hard and inflexible terms, those resisting the stoutest assault of analysis, these alone are regarded as the legitimate and strait-laced data. And if this is the case, such post-analytical terms, incapable as they are of being reduced to anything more elementary or more primitive, partake of the nature of "solutions." There is supposedly nothing problematic about epistemological data. Repelling the need of further analysis, they have a finality which can obviously not belong to scientific data.

And yet, despite the contrast between pre-analytical and post-analytical data, is it not apparent that epistemological data are scientific in disguise? The signification of a datum as a "starting-point" is never lost sight of in epistemology. In the beginning is the given. This is a maxim for every discipline; but whereas in science the given is an initial state by which knowledge is carried *forward*, in epistemology the given is a primary state to which analysis carries us *backward*. Back of our knowledge of objects

and the objects of our knowledge lies something aboriginal, and to this the tortuous work of epistemological analysis endeavours to return. The epistemological anomaly resides in the demand that the given be at once something "initial" and "terminal"—the Alpha and Omega of knowledge. It is endowed with precedence, sometimes genetic and sometimes evidential, but it is a precedence which coincides with the end of analysis. But how can we be sure whether the limits of analysis are not spurious limits, due simply to our present impotence to discern? Can epistemology, unlike any other science, evade the conception of elastic finality? Besides, the faith in the revelations of unstretchable data by *rigorous* analysis or *pure* intuition (and *pure* intuition is itself an analytical product, in the sense that neither its enjoyment nor its definition is possible without a process of abstraction or insulation from the mixed and impure states of ordinary knowledge) is a faith bound up with too simple a view of judgment and of truth. This, however, will occupy us later.

I have allotted so much space to a consideration of the "given" because the central thesis of Problematic Realism may by means of it be stated most succinctly. Is the real given, and is the given real? At first blush the question seems meaningless. With *both* of its terms so equivocal (the ambiguity of the "real" will be mentioned anon), how can the suggested equation be hazarded? Nevertheless we cannot avoid linking each to each the "real" and the "given," for to sever them is to leave both concepts naked of all possible meaning. For me the real is indeed the given, and given in both senses of this misused term. But the two senses of the given signify for me different aspects of a more fundamental notion—namely, the notion of the problematic. Accordingly, I state the equation thus: the real = the given and the given = the problematic. From one point of view, the real is a pre-analytical datum, as it figures in any scientific investigation, and as such it is problematic at both ends of the investigational scale. At one end the real is a problem productive of scientific inquiry, and at the other it is a problem which scientific inquiry itself produces: it is the real as ultimately described or explained,

but in terms whose ultimacy is elastic in the light of progressive verification and discovery. From another point of view, the real is a post-analytical datum, such as it emerges on the highest or deepest reaches of philosophical discernment, and there its problematic character has a double face rather than a dual direction. Is the post-analytical datum a pure *what*, or is it a pure *that*? If it is a pure character or quality—and this seems to be the prevailing opinion—what is the *that* to which it is attached? For those who cannot envisage the possibility of "floating adjectives," such a datum is problematic with respect to the substantive it qualifies or characterizes. If it is a pure substantival entity—and as such it appears to me to be disclosed by analysis—what are its true predicates or attributes? I, for one, cannot readily dissolve the union of the *what* and the *that*. I can conceive neither of unanchored qualities nor of unqualitied (though, indeed, of unqualified or unqualifiable) substances. The post-analytical datum, the result of *final* analysis, has to be conceived either as a quality belonging to an unknown substantive or as a substantive of which the true description is uncertain. In either case the datum is problematic. For my own part I find nowhere in my experience anything corresponding to either abstraction. I have never encountered either loose qualities or characterless entities. Yet, if I take any concrete experience and remove by abstraction all that I can possibly detach from it, what remains is an indeterminate *this* or *that*. I find it quite possible to disengage by analysis the *that* from the *what*, but I cannot perform the opposite operation and take away the *that* from the *what*. The appeal to experience is here unavailing; never are bare qualities and unqualitied entities "given," if given be understood as "presented," they are "taken" by an act of difficult abstraction from a concrete situation in which they are always found together.

The analysis of concrete experience, when it culminates in the priority of the *that* over the *what*, brings us face to face with the notion of substance. Substance is indeed the absolute surd of all awareness and all analysis. I am not unmindful of the many meanings which the idea of substance connotes. I am using it

here not as category or as thing. As category, its use is logical or formal, indistinguishable from that of the grammatical subject. As thing, its use is empirical or material, applicable to every cohesion of qualities and relations that exhibits relative individuality and permanency. What I here mean by substance is metaphysical self-existence. It is a name for the reality *underlying* whatever we encounter in concrete experience. It is the absolute ground of things, the nethermost root of them. It is that than which there is nothing deeper. Existing upon its own terms, it is the fertile source of all that appears. It asserts itself in all things, and can be known only through its manifestations, none of which, however, can define or exhaust it. *What* is its intrinsic nature? This is the perplexing question perennially present in every science and in every philosophy. The "ontological argument," in its traditional employment, has distorted a genuine problem by placing the cart before the horse. Taking for granted God's essence, partisans of this argument have by tortuous devices sought to demonstrate his existence. The problem lies in the opposite direction. It is easy enough to grant God's being, if God is (as in the case of Spinoza) but another name for substance or self-existence; but what save a verbal definition assures me of his nature? His essence (his *what*) is infinitely more problematic than his being (his *that*). I am ready, indeed, to accept as speculatively plausible all the "proofs" of God's existence, but who can tell me whether God is actually good and wise and powerful? The mystics are less perverse. Sure as they are of God's being, they consistently refuse to define his attributes. Theirs is the only proof entitled to be called *ontological*, since the assurance it vouchsafes is confined to the bare affirmation that "God is." The attempt to describe his intrinsic nature, they rightly hold, is enmeshed in snares and illusions. How extremes meet! The logic of mysticism—I am, of course, not speaking of its psychology—is the logic of modern science. It is the logic of what I have called the metaphysics of scepticism involved in scientific methodology. Science, too, is infinitely more certain of the being of things than it is of their inner nature. The "given" in science—the incipient occasion or generating condition of inquiry—

has being as a matter of course, for the question *what* the datum is, the question with which scientific description is primarily concerned, presupposes the presence of *that* which provokes the question. It is not the being of the datum which is ever doubtful, but the manner of its being, the circumstances under which it appears, the specific characters and qualities it owns, the detailed affinities to other appearances it enjoys. In short, science is description, and description means adjectival qualification of an antecedently present substantive. And since adjectival qualification of any scientific substantive can possess elastic ultimacy only, owing to the extensible character of verification and the ubiquitous possibility of discovery, the scientific object, though never surrendering its substantival status, has but a temporary title to the adjectives assigned to it. Scientific methodology is thus always dealing with indubitable substantives that are adjectivally problematic. Since this is true of all the sciences, the ontology common to them may therefore be described in terms of substance. All science presupposes the self-existent whose manifestations it notes; and since the manifestations of substance are relative to ceaseless discovery and the noting of them subject to endless verification, "scientific" description can never disown its problematic character. And is it otherwise with descriptions called "metaphysical"? Metaphysical systems, too, if Aristotle is right, are "sciences"; they are no less intent upon describing the essential attributes of being, limiting or qualifying by preferential adjectives an antecedently existing substance. It is the "same" substantive reality which in all the competing systems of metaphysics is subject to divergent descriptions. And what do these rival descriptions indicate save the priority of the *that* over the *what*? Of the substantival status of reality we are much surer than we are of its adjectival nature; this holds in the case of metaphysics as much as it does in that of physics. The possibility (sufficiently attested by the perennial strife of metaphysics) of ascribing to the same "world" or "universe" emulous predicates, all reeking with ultimacy, may justify two different positions. We may move in the direction of mysticism, refusing altogether to describe reality, on the ground of

its being intrinsically unqualitied and hence unqualifiable. Or we may move in the direction of realism, describing the inner nature of things as problematic, on the ground that substance is so richly qualitied as to license the multiform qualifications of it by the different metaphysical systems. Any escape from Problematic Realism by a way other than the mystic seems to me to culminate in anthropomorphism, for what else than anthropomorphic is the identification of the inherently qualitied real with the preferential qualifications of it such as are embodied in the sundry systems of human judgments?

For the view that reality is always manifest substantivally but never adjectivally—and this is the essence of Problematic Realism—I find confirmation in the nature of judgment itself. What is judgment? No question is more crucial. For it is judgment which renders explicit by its work of predication the adjectival nature of reality, and it is judgment to which alone the distinction between the true and the false appears to be relevant. Judgment thus communicates at once with reality and with truth, being a sort of hyphen between them, separating and joining at the same time. A thing so fundamental—the vehicle of truth in pursuit of reality—must obviously be purged of its wonted confusion. The confusion from which judgment ordinarily suffers is due to the neglect of its manifold nature. Judgment is too commonly identified with only a fragment of its essence. I find judgment to be a composite term. Any judgment—the simple perceptual judgment that "this flower is red" may serve as illustration—is the expression of a man's *belief*; it is the discursive *statement* of such belief; it is what *awareness* prompts a man to believe and to assert that he believes; and it is a *description* of a real object or situation occasioning the awareness in question. These four aspects of judgment—the personal, the formal, the noetic, the material—I find distinguishable, but not separable. They are all present whenever any significant judgment is present.

This complex or composite nature of judgment, which in traditional theories tends to be violated either by the suppression or exaggeration of one or another of its aspects, is the source

of two major paradoxes. (I shall briefly mention them and show how each points in the direction of Problematic Realism.) One paradox—the "ontological," as I may call it—centres around the so-called "existential" or "objective" reference of judgment. Reference is, of course, an indicative relation, but judgment, endowing whatever it indicates with a determinate nature, transforms ineluctably by its work of predication the act of reference into an act of description. In other words, the only mode of reference to its object which judgment can establish is by describing it, i.e. by asserting *what* it is. The objective reference *of* judgment and the description of the object *by* judgment are identical acts. And if this is so, the situation is indeed paradoxical: the object referred to by judgment is whatever judgment itself succeeds in describing. The absolute fusion of the referential and descriptive acts on the part of the judging process inevitably leads to the confusion of different ontological levels, as if the referred real and the described real, distinguishable by analysis, could ever be made to coincide: the referred real is the *subject* of characterization, the described real is the characterized *object*. The referred real is simply that boundless ontological realm to which we give the compendious name of "being." In this realm room is provided for everything imaginable or mentionable. Prior to the specifying work of judgment nothing is lacking in being; even "nothing," as a logical conception or as a term in discourse, has an ontological status. It is to the labour of attribution wrought by judgment that we owe the distinction *within* the sphere of being *between* one mode of being and another. While it is possible with the aid of specific attributes to distinguish the existent from the non-existent and the real from the unreal, it is not possible to *refer* to anything not rejoicing in being. The *reference* of judgment is never "existential"; it is merely "ontological." Existence, connoting as it does a *determinate* region within the area of being, has such determinations as judgment by its act of *description* ascribes to it. The nerve of the ontological paradox of judgment lies in the irremediable fact that its reference is identical with description, yet that to which it refers must be differentiated from what it describes. What judg-

ment describes is some aspect or mode of being as disclosed in awareness. And since awareness may be of the unreal and the non-existent, what is "given" in awareness, never problematic as regards its being, is always problematic as regards its reality or existence, until judgment has determined by valid description its intrinsic qualities and relations. Judgment, therefore, when its composite nature is acknowledged and not mutilated, furnishes another road towards Problematic Realism. Judgment is always a mind's expression of a belief in simultaneous commerce with the two dimensions of "knowing" and "being." In so far as its noetic aspect can by analysis be detached from its material aspect, judgment simply refers to what a mind is aware of. And what it is aware of is something indubitable substantivally but problematic adjectivally. It is judgment, on its material side, which by its work of predication determines whether anything rejoicing in being is included also in the more restricted areas of reality and existence; but whether judgment's description of being corresponds with its intrinsic or qualitied nature involves the question how far we can validate judgment's claim to "truth."

This leads me to the second paradox with which judgment is burdened—namely, the "epistemological." This paradox resides in the fact that truth has a four-fold root. If truth is a property of judgment, it is a property of its four aspects; and truth is equally anomalous whether it is the property of the ingredients of judgment taken separately or jointly. If truth belongs to the components of judgment distributively, we have four kinds of truth; and if it belongs to them collectively, we may secure the unity of truth, but only through an arbitrary fiat that one component exercises control over the rest. If by analysis we isolate the four elements which together belong to the meaning of judgment, we may readily construct a different theory of truth appropriate to each of them. (1) Detaching belief as the primary element of judgment, the truth of it may be called *adverbial*, if the meaning of belief lies, not in its verbal assertion, but in its practical enactment, and if any distinction can be established between successfully and unpropitiously enacted beliefs. That belief, the enactment of which is functionally efficacious, is

truly efficacious. The emphasis upon the adverb "truly" as fundamental seems distinctive of pragmatism. And since the adverb always expresses a way of acting, successful or satisfactory practice is obviously the standard to which adverbial truth must conform. (2) If we identify judgment with the formal expression of it, truth acquires a purely logical status. Truth is then pre-eminently a noun or substantive. It is a name for a self-generated concordance of propositions divorced from their psychological origin and actual application. Truth, consisting in agreement of discourse with itself, when discourse is carried on in accordance with certain rules laid down and recognized as coercive by discourse itself, may be called *substantival*: it is an independent "body" or "system" of pure propositions. And substantival truth, being a structure of harmonious discourse, is manifestly subject to the standard of consistency or coherence. (3) The definition of judgment as the exhibition in discursive dress of an act or state of awareness leads to the notion of truth as *adjectival*: "trueness" is an inexpungible quality of awareness itself, and may thus vicariously be attached to the judgment, if judgment is nothing but a case of awareness given articulate expression. My judgment can never be false if what it expresses is *merely* what I am aware of. The test of adjectival truth accordingly is the test of awareness itself. And what is this test but immediacy? Whatever I am immediately aware of is true, *if* I am immediately aware of it. (4) If judgment is primarily a description of something real or existential, truth is material—that is, truth is *about* that which somehow transcends belief and discourse and awareness. Neither the judgment as description nor the described "something" is true by itself; true is the relation between them. Material truth is a form-matter truth; truth resides in the link between the two and not apart from either of them. We may call this truth *bi-prepositional*, since it is the truth *of* the real and *by* discourse, or we may speak of it as *hyphenated*, since truth here is a span or bridge between the world of discourse and the world of things, and the test of such truth is evidently by correspondence or agreement between judgment as description and the described thing or event transcending it.

The mutilation of judgment thus leads to the growth of a separate kind of truth from each of its segmented roots. Is truth adverbial, substantival, adjectival, or prepositional? And is it tested by practice, coherence, immediacy, or correspondence? Whatever names we give to them—and I do not set store by the labels I have chosen—these four kinds of truth are as distinguishable as the four aspects of judgment with which they are correlated. The epistemological paradox is equally irremediable whether we regard each truth as a truth *sui generis* or whether we proclaim one as the genus and the remaining three as its species. Shall we confer plural sovereignty upon a quadrified truth, or absolute sovereignty upon a single overweening type holding in subjection whatever other truths may rebelliously assert their independence? In the former case, any judgment is in the anomalous position of being at once true and false, for it may be true substantivally (formally or rationally), but false prepositionally (existentially or materially), or true adjectivally (intuitively or mystically), and false adverbially (instrumentally or pragmatically), and vice versa. In the latter case, to which kind of truth shall we accord the place of genus enjoying exclusive sovereignty? If truth is the truth of judgment as composite, one only of the components being in the privileged position of mastery, to which shall we yield the sceptre? If the claim to such rule be based upon self-sufficiency and inclusiveness, has one element the advantage over the rest? As a matter of fact, each element has the power to annex and to control on its own level the other three ingredients of judgment.

The epistemological paradox of judgment, the analysis of which leaves us either with four unassimilable kinds of truth or with four different ways of assimilating them, affords another approach towards Problematic Realism. The truth-paradox is the heel of Achilles of human knowledge. Human knowledge can be neither true nor false until it passes through the crucible of judgment, but judgment has a composite nature with filaments stretching out in four different directions. The truth of judgment is relative to the way a man believes and thinks and experiences;

and since his ways of believing and thinking and experiencing can be distinguished but not separated from the descriptive function of judgment, the described real can never be identical with the real described. I am forced to the inference that the real as judgmentally qualified can never coalesce with the real as internally qualitied, which is to say that the inherently adjectival nature of reality is for human knowledge problematic. The truth of our descriptive judgments, if true at all, is a resultant of several factors, and some are induced by our responsive natures rather than by the nature of reality to which in our judgments we seek to respond.

Judgment for me is thus always the response of a mind to a problematic situation. The four constituents of judgment simply represent different levels of response. By truth I mean the response on each level conceived as consummated. On all the levels truth has thus the same "meaning": it is completely successful action or finally coherent discourse or absolutely immediate experience or ultimately relevant description. On all these levels judgment functions as one and whole, since its ingredients are mutually implicative; and its truth, if achieved, is simply the "solution" of such "problems" as are encountered in action, in thought, in experience, and in science. The truth-relation is in the end definable as a relation between a "problem" and its "solution." But is the "solution" ever attained? *Relatively*, yes. Our enacted beliefs enjoy the success which a dynamic ideal of "work-ability" is able for the nonce to guarantee; our deductive systems of propositions possess such actual coherence as the man-made rules of discourse permit; our intuitions and visions may achieve completeness and infallibility in conformity with the elusive or illusive standard of immediacy; and our sciences may indeed assume, in the light of *present* verifications and discoveries, that their descriptive versions of the real are ultimate, remembering, however, that such ultimacy is elastic. The standards in control of man's fourfold response embodied in judgment are all "regulative"—ideals to be striven for, not fixed ends ever attained or attainable. The truth-relation, being on all the levels of response a relation between

a "problem" and a "solution," must thus be regarded as essentially plastic and variable.

The notion of levels of response, in which the analysis of judgment and of truth culminates, enables me to survey "the life of reason" from the point of view of incommensurable attitudes, to each of which I must assign a relatively autonomous character. The German expressions, *Weltanschauung* and *Lebensanschauung*, though verbally sonorous, are more or less factitious, as if the whole of our tangled world and confused life could be focussed and compressed into a single snapshot. What is there so disconcerting about a diversity of incongruous views? It does not worry me to look upon the world and life from different standpoints, and I do not feel abashed because I cannot combine them into a total and absolute perspective. Thus—to mention three divergent "views"—between "anthropomorphism," "solipsism," and "cosmomorphism," I do not feel the need of making a drastic choice or of uniting them into a "higher synthesis." I find them equally relevant and equally important.

In ethics and logic I am frankly anthropomorphic: I do not see how in action and in thought we can ever get out of the human skin. What is morally good and formally true for species other than the human we can either not assert at all or we must give to human postulates a cosmic range. The latter alternative is grossly impertinent and constitutes bad anthropomorphism. The *general* will (if there is such a thing) which expresses itself in human behaviour and the *universal* reason which asserts itself in human thinking are general and universal only for a particular species. To graft human ideals upon cosmic nature is a pathetic fallacy. Good anthropomorphism lies in the avoidance of this fallacy by giving unto Caesar what is merely Caesar's. If nationalism, for instance, is morally good for man, what folly to extend it to other animals or to angels! And if coherent discourse, whether mathematical or rhetorical, syllogistic or dialectical, is logically true for the human understanding, is it not likewise absurd to regard it as coercive for beings possessing different forms of thought and of speech? It is human action alone to which the morally good is relevant; and logical or formal

validity is pertinent only to human discourse. What I have called adverbial truth and substantival truth are both inescapably anthropocentric.

Anthropomorphic as I am in ethics and logic, I am willing to be called a solipsist in art and religion. In so far as they are embodied in action and discourse, art and religion share, of course, in the anthropocentric nature of morality and logic; and in so far as they are held to make manifest, sensuously or pictorially, a trans-human world, art and religion are cognate with the explicitly cosmocentric endeavours of science and metaphysics. But when I strip away from art and religion those expressive and representative features which, being the defining characteristics of other modes of response, are but ancillary to them, I am left with intimate intuitions and ineffable feelings radiating from the inaccessible depths of solitary beings. The original seat of art and religion is in the inner recesses of each soul in perfect isolation and private "enjoyment." The inner life with which art and religion is primarily concerned is indeed the life of "windowless monads." And those who make light of solipsism because it is seemingly confined to the life of feeling and dreaming must be reminded of death as the most striking instance of it. I know that I shall die alone. The experience of dying will be endured by me in complete solitude. At that moment of supreme anguish or supreme joy the world will collapse for me like a house of cards. We shall all be solipsists when the flame of life flickers away from us. But dying is no exception. We are no less alone during all other moments of intense experience, when, insulated from other beings, we revel in our own ego-centric world. Such solitary moments come to their fullest fruition in art and religion. And if during the absorbing moments of æsthetic enjoyment and religious meditation we appear to be selfless, it is because no other selves intrude to give rise by contrast-effect to the consciousness of separate selfhood. To be absolutely alone is to be free from that oppressive loneliness born of social intercourse. Speculative mysticism has its *raison d'être* in the radical solitariness of all feeling: mysticism is emotional individualism distilled into philosophical solipsism. And if mystic self-absorption is the

distinguishing mark of those experiences commonly called æsthetic or religious, the standard of their truth lies in the bosom of the self who has these experiences. Here if anywhere are comparisons odious. What I have called adjectival truth is but a pedantic circumlocution for solipsism. Every judgment has an inalienable verity if it is but a record of what a mind chances to experience. *A fortiori*, therefore, each æsthetic or religious judgment is indefeasibly true for him whose private feelings and intuitions it expresses. The anarchy which prevails in the case of the æsthetic and the religious judgments of mankind is thus not to be wondered at: it results from the sincere asseverations of idiosyncratic solipsists, one *ipse dixit* being as infallible as another.

Such anarchy we find justly intolerable in dealing with judgments designed to describe "the nature of things." In science and metaphysics we must seek to eschew—how far we can succeed in this is another question—solipsism as well as anthropomorphism. Here our *attitude* is deliberately cosmocentric; the centricity which on other levels of response belongs to the human species or to the single self is in science and metaphysics transferred to a wider sphere, to a sphere not coincident with the scene of human action and discourse or with the seat of idiosyncratic intuitions and feelings. What I call cosmomorphism exacts a conscious surrender of those perspectives which enable us to define judgment either as belief or as discourse or as awareness: all these differentiae of judgment tend to magnify the importance of the human or individual agent engaged in *judging*. It is only in relation to *subjects* functioning in certain ways that the three varieties of *immanent* truth—pragmatic or adverbial, formal or substantival, mystic or adjectival—can be rendered unexceptionable. But when stress is laid upon the descriptive office of judgment the centre of gravity shifts at once from the act of judging to the thing judged. A different designation is thus needed for the truth of descriptive judgments. Material truth is the name commonly given to it. Material truth is *transcendent* truth: it is *of* something transcending the forms in which we incase it under the pressure of anthropocentric and egocentric activities

and experiences. Such truth (in my own terminology) is bi-prepositional, but only one preposition plays here the dominating rôle. All truth is *of* reality *by* a mind employing the complex vehicle of judgment. But whereas in anthropomorphism and solipsism the importance lies in the fact that truth is truth *by* a mind, in cosmomorphism the accent falls on the other preposition, and truth is viewed exclusively as truth *of* the real or existential. In the interest of cosmomorphic truth I must be willing to sacrifice one preposition in favour of the other.

It is of the essence of Problematic Realism to recognize at once the necessity and the impossibility of such sacrifice. We long to be cosmocentric, yet it is a longing that cannot be satisfied. The choice of the term "problematic," by which my realism is to be distinguished, may now be seen to have a double implication. One implication is ontological: in suffering no adjectival limitation of being, wrought by judgment, the enjoyment of absolute certainty, the substantial status of the real is made impregnable against anthropomorphism and solipsism. The assertion that the adjectival nature of reality is for human knowledge problematic involves the most complete avowal of cosmomorphism, since it recognizes the disparity between the intrinsically qualitied real and the real as humanly qualified. The other implication is epistemological: the characterization as problematic of the results of our cognitive efforts to lay bare the inherently qualitied nature of being follows from the composite character of judgment whose cosmocentric direction can be distinguished but not separated from its anthropocentric (or egocentric) source and origin. In other words, judgments *of* the real, being ineluctably judgments *by* the mind, are perennially precarious. The refusal to accept as final the adjectival limitation of the real by human judgments—and scientific and metaphysical judgments are certainly human—is complementary to the ontological notion of a cosmomorphic substance. These two implications of Problematic Realism constitute the quintessence of scientific methodology. Scientific methodology, as I have shown, requires for its application a cosmomorphic reality, the descriptions of which, however ultimate, must remain elastic

or problematic, for reasons at once objective and subjective. It is this conception of the elastic ultimate which furnishes the basis for a new sort of metaphysics—the metaphysics of scepticism. Problematic Realism is but another name for this kind of metaphysics. As for other brands of metaphysical generalizations—those that issue in accounts of the nature and structure of the universe presumably ultimate in a dogmatic or inelastic sense—the very divergences between them converge upon Problematic Realism. For what are they but the Procrustean translations of a cosmomorphic substance, differing from one another in accordance with the multifarious visions by which speculative minds are inspired? Whenever any one of these mighty generalizations will have been proved undeniably true—not as a national policy is pragmatically true, nor as one of the non-Euclidean geometries is formally true, nor as the æsthetic contemplation of a sunset is mystically true, but true cosmocentrically as a final description of the intrinsic nature of reality—then I shall gladly renounce Problematic Realism.

The salient features of my philosophy, to which I am here for the first time attaching a hazardous label, may be found elaborated in a number of essays and articles. The chronological order of these has determined the form of the present sketch. Although still in the making, my philosophy has deviated but little from its earliest inceptions and utterances. I find it difficult to state at what period in my intellectual development the philosophic insight which I now call my own came to light or took on definite shape. Various influences have contributed to its genesis; and some of these I shall now briefly indicate.

I confess to an early attachment to Kant's "thing-in-itself." I could never make head or tail of transcendentalism without its realistic underpinning. The cavalier neglect of Kant's realism by those who profess to follow in his epistemological footsteps has always seemed to me a scandal. It is the "thing-in-itself" which saves experience from being downright autogenous. An unknown ground of knowledge, though dialectically a baffling conception, is certainly more intelligible than the alternative we are bidden to countenance—namely, the conception of knowledge as self-

generated or self-grounded. To escape from a cosmomorphic reality inaccessible to human knowledge, we are asked to accept the absurd apotheosis of anthropocentric sensibility and understanding. The reflection upon the necessity of some "thing-in-itself," without which knowledge has to be conceived as producing itself as well as its objects, first led me to the view I now designate as Problematic Realism. I soon perceived that the "thing-in-itself" is but an infelicitous name for substance or self-existence, and in that I soon recognized a cosmomorphic bulwark against the connivance and idolatry of human passion and logic.

To Josiah Royce, my first teacher in metaphysics, I owe a debt greater than can here be intimated. From him I first learned to suspect the "existential predicate" of being the bull in the philosopher's china shop. His Four Conceptions of Being showed me that nothing can apparently be characterized as "real" save in relation to the truth of this or that metaphysical theory. This soon led me to the following dilemma: either the "real" is so *neutral* a term that, prior to the validated truth of a particular ontology, it is applicable to anything and everything—in which case it is meaningless—or it is a *eulogistic* term, restricted by metaphysical fiat to favoured entities and relations—in which case it is useless until the fiat question has established its claim to exclusive validity. The reflection upon this dilemma has taught me to be wary of a term so strangely equivocal and to use it in the manner already proposed. The "real," to be initially free from the constraining influence of any special ontology, can obviously signify nothing more than the substantive occasion of metaphysical inquiry, the adjectival nature of which must remain problematic until judgment concerning it attains the degree of material truth supposedly inelastic. The "real" and the "problematic" thus gradually grew in my mind as inseparable as twins. In this direction Royce's examination of the "ontological predicate" inevitably led me. His own Idealism or Voluntarism, though logically formidable, could never elicit my assent. I could never escape the conviction that his massive edifice of dialectical construction rested on the parlous foundations of solipsism and anthropomorphism. The "internal meaning" of ideas, starting

the sloping process up to God, to the "external meaning" of absolute or cosmomorphic bulk, could never lose for me its taint of idiosyncrasy or humanity. The "purpose" seeking fulfilment, which is supposed to constitute the "internal" life of every "idea," I could not take seriously as being anything else than uniquely egocentric or uniformly anthropocentric: purposes not *analogous* to my own solitary strivings or to the collective ends embodied in the stratified institutions of human society I simply could not fathom. To draw the universe within the orbit of "purpose" seemed to me tantamount to a denial of its cosmocentricity. Royce's metaphysics, with which I earnestly wrestled with all my might, had the effect of establishing in my own mind as fundamental the distinction between reality as substantival or cosmocentric and the adjectival limitations of it inspired by will-attitudes either incommensurably individual or concurrently human.

My initiation into the mysteries of Hegel's philosophy, which played an important part in my intellectual development, I owe chiefly to Royce. Left to myself, I should have imbibed the hackneyed interpretations of Hegel repeated in a hundred textbooks. Royce, however, taught me to look for the genius of Hegel in the neglected *Phenomenology* rather than in the exploited *Logic*. The *Phenomenology*, accordingly, has been one of my chief sources of philosophic inspiration. The dialectical method, as exhibited in that perverse but great book, strengthened immeasurably some of my spontaneous convictions. I soon discovered in Hegel's dialectic two distinct strains, one repelling and the other attracting me. What I found repellent was the view of the dialectic as a mode of rhythmic *experience*. This strain, which I call the *histrionic*, obliges us to equate the real with the totality of "parts," enacted and superseded by an Absolute Mind. The universe is thus made to proclaim the glory of a versatile genius in whose dramatic will and reason we must find the spiritual necessity of all the seemingly irrational gyrations in nature and history. The dialectic as a method of tragic experience is simply a sinister apology for the spirit of romanticism: Truth is lodged in the restless and insatiable mind of a Protean

Absolute. By a strange equivocation Hegel managed to impugn the romanticism of the human self while endowing with romantic traits his super-human "Subject." More to my liking I found the second strain in his dialectic, which I call the *comic*, because it is an impersonal mode of exhibiting the perpetual incongruities involved in all human ideas and attitudes. This side of the dialectic appealed to me as a weapon for laying siege to everything dogmatic by rendering its partisan claims logically ridiculous. Hegel's dialectical method, though impotent to win absolute knowledge, led me to see the absurd consequences that inhere in the attempts to lodge absolute truth in anything egocentric or anthropocentric. His *Phenomenology* thus became for me a comedy of errors, a vast playground of human ideas striving to be more than human. The impressive panorama of our typical attitudes and beliefs, all suffering from the illusion of perspective and the blindness of partisanship, taught me to turn Hegel's idealism into "its own other": the lesson I learned was to accept as absolute a realistically qualitied substance, of which all the human qualifications, Hegel's own included, must remain dialectically vulnerable—that is, problematic.

Fresh impetus in the direction of Problematic Realism I received later from Mr. Santayana. His books, the depths of which I did not gauge at first, became for me, as I read them over and over again, treasure-houses of sanity and wisdom. In melodious language, free from cant and sophistry, Mr. Santayana has richly variegated the only theme that really matters in all philosophy: the relation between substantive reality and the translations of it in the polygot terms of human reason and imagination. His naturalism, viewed as cosmomorphic description, seemed to me too positive, and his scepticism of existence, assumed to follow when knowledge by suspension of judgment becomes intuitive or disinterested, too transcendental. But the difficulty in understanding the relation between his naturalism and scepticism could never obscure the fact for me that for Mr. Santayana no identity can be established between the intrinsic nature of substance and the symbolic portrayals of it wrought by the human (or animal) psyche. Mr. Santayana taught me not

to confuse the life of reason with the life of substance. The life of reason, being essentially egocentric and anthropocentric, being a life in which romance and fable are such potent organs, is incommensurable with the inner nature of what exists in itself, and what can only be understood through itself. The understanding of substance, beyond the fact that it exists, involves the impossible feat of seeing it from its own point of view: a feat as impossible for Mr. Sanatayana as apparently it was for Spinoza. Even the highest kind of knowledge to which Spinoza appealed—even the view of the universe *sub specie aeternitatis*—was powerless to reveal the *specific* nature of the *infinite* attributes belonging to substance. And since the indigenous attributes of substance (on the assumption that their number is infinite) are unfathomable —a view which for different reasons Mr. Santayana shares with Spinoza—the human "circumnavigators of being," to employ Mr. Santayana's striking phrase, in fathoming the universe, sound their own hearts and minds, and import into cosmic nature the illusory limits of their dreams and speculations.

These dreams and speculations, though no indices to the secret operations of substance, are precious as human responses to them. The recognition that in framing judgments about the cosmos we never leave the human plane does not detract from their "truth," if truth is a category pertinent to *all* the ingredients of such judgments. The notion that truth is a category ancillary to that of "response" I owe to the pragmatists, but I am reluctant to connive at their vernacular, which is either too psychological or too biological. I refuse to put my philosophical eggs in the basket of a *particular* science. The pragmatic element in my doctrine, which is speculative or dialectical, was inspired more by George Simmel than either by William James or by John Dewey. From these two great American liberals and liberators I imbibed, indeed, the spirit of rebellion against the pretensions of absolutism, but a constructive humanism, not enmeshed in exclusively psychological or biological terms, I first found in Simmel. The books of this subtle thinker played no inconsiderable part in shaping my view of "differential" metaphysics. It was perhaps through them that I first came to understand the positive

implications in the perennial strife of systems. Metaphysical harmony is no more feasible than either religious harmony or political harmony. All the "humanities" exhibit incomparable responses to the same "problematic" reality, each at once universal and particular, unique yet perpetually recurring, like a musical theme which is capable of endless variations. Problematic Realism, though issuing in what I have called the "metaphysics of scepticism," which is nothing more than a speculative extension of the "elastic ultimate" involved in all scientific methodology, is on its positive side a philosophy of liberalism and tolerance. Just because the nature of reality is so everlastingly problematic every human effort to sound its depths becomes invested with indelible worth.

PRINCIPAL PUBLICATIONS

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A TEMPORALISTIC REALISM

By ARTHUR O. LOVEJOY

Born 1873; Professor of Philosophy, The Johns Hopkins University, Baltimore.

A TEMPORALISTIC REALISM

THE metaphysics of the philosophical teachers whose influence was dominant in most of the American universities thirty-five years ago had one common and fundamental premise which was supposed to be established beyond the possibility of reasonable doubt; to question it was simply to betray one's want of a genuine initiation into philosophy. It was the proposition that, in Bradley's words, "to be real, or even barely to exist, is to fall within sentience; sentient experience, in short, is reality, and what is not this is not real. There is no being or fact outside of that which is commonly called psychical existence." As my first teacher in philosophy, George Holmes Howison said, in summing up a memorable philosophical symposium in 1895: "We are all agreed" in one "great tenet," which is "the entire foundation of philosophy itself: that explanation of the world which maintains that the only thing absolutely real is mind; that all material and all temporal existences take their being from Consciousness that thinks and experiences; that out of consciousness they all issue, to consciousness they are presented, and that presence to consciousness constitutes their entire reality." With almost a whole generation of acute and powerful minds this passed for a virtual axiom. And with a great part of the succeeding generation of American and British philosophers the contradictory of this proposition has passed for a virtual axiom: viz., that "all experience"—or, at least, "all sensory experience"—"carries with it the guarantee of the extra-mentality of its object." To me neither of these propositions has appeared either self-evident or, on its face, particularly probable. It is, obviously, unpleasant and disillusioning to be compelled to believe so many of the teachers of one's youth, on the one hand, or so many of one's most eminent contemporaries, on the other, to be simply the victims of a specious pseudo-axiom concerning the primary issue of metaphysics; but this alternative, at least, has been unescapable for most of us who contribute to these volumes. It is, however, still more unfortunate, and still more productive of doubts about the way in which the business of philosophizing is conducted,

to be compelled to regard both groups as basing their philosophies upon opposite and equally unconvincing pseudo-axioms. And in this latter position I regretfully find myself placed. I am unable, in short, to see any inconceivability in the supposition that "reality" may be of a mixed character, and that the "objects" apprehended in sensory or other experience may be in some cases purely "mental" and in others "extra-mental"—though I regard these traditional adjectives as not altogether happily chosen; and I find what seem to me strong reasons for regarding this supposition as probable.

The student of philosophy in our time, in other words, appears to me to have usually been confronted with the entirely gratuitous dilemma of an absolute idealism or an absolute realism (i.e., a "pan-objectivism"). To be unable to embrace either horn of the dilemma—to believe in a physical world, a most disreputable thing in the eyes of the one party, but also to believe in "ideas" in something like the Cartesian and Lockian sense, an equally disreputable thing in the eyes of the other party—is to be in a position which, among its other inconveniences, imposes upon one who has a natural wish to vindicate the reasonableness of his opinions the necessity of conducting a polemic upon two fronts at once, or, at the least, of meeting two convergent attacks. And to do both (not to say either) in a manner adequate to the importance of the issues and the number and undeniable plausibility of the considerations urged upon the two sides would obviously be impossible within the limits set for these papers. But there is, after all, one considerable advantage in an intermediate position: the object of convergent attacks may save himself some effort by stepping aside and permitting the attacks to converge upon one another. The result may be the destruction of one, if not both, of the assailants, or at least the weakening of one or both. And of this possible economy of effort I shall take advantage. Some of the reasons why the "great tenet" of idealism has ceased to appear to me evident or probable will, I imagine, be found clearly and forcefully expressed in other contributions to these volumes; and it would be a redundancy to repeat them here. Most—though by no means all—of us in America who were initiated into

philosophy thirty or forty years ago have passed, up to a point, through much the same reflective experience; we have found the idealistic creed, in one or another form of which our philosophic youth was nurtured, untenable, and have done so in part under the pressure of the same considerations. But of those who have gone thus far together, the greater number (at all events until recently) have seen no permanent assurance for philosophy against a relapse into the error from which they have themselves, as they believe, escaped, unless the road be followed almost or quite to its opposite extreme—unless, that is, it be held, either that "consciousness" does not exist at all, or that, at most, it is a mere otiose awareness of objects in no way dependent upon it—that, in other words, there are *no* existences which "take their being from consciousness," or whose "presence to consciousness constitutes their entire reality." In my own belief the real danger of a relapse lies rather in passing to this alternative extreme; but I am glad to profit by such arguments as others have offered to show, at least, the necessity of abandoning the old position.

There is, however, one consideration, relevant to the question of the tenability of idealism, but also to many other philosophical issues, which has figured much more largely in my own reflection than it has, so far as I have been able to gather, in that of most American realists; and I shall be less likely to repeat what others will have better said if I dwell chiefly upon this. To all theories about the nature of reality or of knowledge I early began to apply one touch-stone before any other—that of congruence with the most indubitable fact of our experience, namely, that experience itself is temporal. That life is transition; that our existence is meted out to us in fragments which succeed and supplant one another; that there is a region of being—even though it consist only of our own past thoughts and deeds and emotions—of which the content and character are settled and unalterable, and a region of the not-yet-realized, which our volitional natures and our most irrepressible affective attitudes —hope and fear, resolution and hesitancy, purpose and planning—manifestly presuppose, and apart from the conception of which they would be meaningless: these have always seemed to me to

be the first and fundamental *empirical* truths of which philosophical speculation must take account. It is in the degree in which it keeps steadfastly in mind the temporality of man's being and his knowing that a philosophy is faithful to the primary certitude of human consciousness about its own nature, and is relevant to human life. But it is precisely from this aspect of existence that philosophy has throughout the greater part of its history made haste to turn its gaze, to fix it upon things that are complete, self-contained, eternal, or immutable. That there are no such things, or even that our chief concern may not be with them, is not, indeed, implied merely by the fact that our *experience* is mutable and successive; but no assertion of any supra-temporal realm of being can, as it has seemed to me, be admitted into a philosophy which does not resort to the silly verbal subterfuge of illusionism, unless the reality of the eternal entities which are affirmed can be shown to be reconcilable with the elementary and immediately certain fact that we mortals *live*—that is, have a transitive, perpetually lapsing and yet continuing, mode of being under the form of time, and with what is implied even by the theory of eternal realities itself—namely, that the knowing of such realities by us occurs in time.

How many difficulties and paradoxes the notion of temporal process presents to the analytic understanding I am well aware; that philosophers, being for the most part eager and impatient rationalizers of the scheme of things, have often had little interest in that notion is only too easily comprehensible. Reality would, of course, be far more manageable intellectually if it were innocent of succession; some of the German Romanticists, and Bergson after them, were quite right in declaring that the natural and persistent tendency of the intellect is to translate temporal into quasi-spatial categories, to treat the flux as if it were stationary and the unrealized as if it were existent. But the embarrassments which the concept of time has created for philosophy are no justification for denying, ignoring, or slighting the strange yet unescapable fact which every man, and therefore every philosopher, is continually experiencing—the fact that his very thought is in process, that there lie behind him moments of being which

he can never in themselves recapture and before him a possible future which he can, perhaps, in some measure foreshadow, but which he assuredly does not yet in its living poignancy possess.

I came, then, to a conclusion which—along with much with which I should disagree—Bosanquet long afterwards expressed when he wrote: "The ultimate crux of speculation" is "the place of time, progress, and change in the universe. There is nothing so difficult as this problem and nothing so essential to reasonable thought or conduct." It was thus the fact of the reality of time, and the problems of the psychological nature of our experience of succession and the significance of the temporal process, that did most to arouse my dissatisfaction with the doctrines of some of my early teachers, and to set me upon the attempt to philosophize for myself; and when, later, it seemed necessary to have a label to attach to the way of thinking to which I inclined, I ventured to coin the word "temporalism" for that purpose.[1] The term still seems to me a desirable addition to the philosophical vocabulary as a means for setting off from all other doctrines those which regard the reality of time as among the irreducible ultimates of philosophy and as a crucial test of the tenability of metaphysical and epistemological theories. A "temporalist" philosophy, as I should use the term, would not necessarily assert that all that is is temporal; but it would insist that whatever empirically *is* temporal is so irretrievably—that its temporality can by no dialectical hocus-pocus be transubstantiated or *aufgehoben* into, or embraced within, the eternal.

Tested by this criterion, the whole scheme of absolute idealism, which had been so earnestly and impressively taught (with variations) by Green, the Cairds, Bradley, Bosanquet, and other British neo-Hegelians, and to which Royce was in the eighteen-nineties giving what seems to me its most coherent and adequate expression, at once broke down. The essence of that doctrine was the supposition that an eternal whole can be conceived to be

[1] The term has not, I believe, been extensively adopted; it is, however, frequently employed by Bosanquet in *The Meeting of Extremes in Contemporary Philosophy* to designate the view which he there chiefly attacks—and which is, in essence, the view that I hold and should so designate.

made up of temporal parts, that an absolute experience, which is incapable of alteration because it is for ever at the goal, can include within itself innumerable experiences of succession. This, even in my student days, seemed to me no better than a flat contradiction—and so it seems to me still. That there may be, apart from the temporal world, some reality corresponding to that Boethian definition of eternity which Royce loved to quote—*interminabilis vitae tota simul ac perfecta possessio*—in other words, to the Aristotelian and Scholastic Absolute—I will not deny, though, as a temporal creature, I find the conception, to say the least, difficult, irrelevant, and unappealing. But that such a reality should be identified with the *whole* of a world of which we temporal creatures and our present strivings, our lost yesterdays and hoped-for to-morrows, are declared to be genuine component parts—this I cannot but consider as preposterous a paradox as any which the history of philosophy has to show—and that, I think, is saying much.

I am, also, not unaware how strong and natural are the religious motives which make for this sort of metaphysics. It is a very soothing and comfortable self-contradiction—as is not surprising; for it is of the nature of self-contradictions to be comfortable, and conversely, I am not sure that there are any altogether comfortable views of the world which are not self-contradictory. The good which all men naturally desire is the privilege of eating their cake and having it too; and this human craving, which finds such small satisfaction in the world of physical experience and the logical world of the "mere understanding," many types of philosophy have sought to gratify in the matter of our beliefs. Psychologically considered, this has been one of the frequent historic functions of speculative philosophy; and psychopathologically considered, it has, perhaps, been a benign function. To escape somewhere from the exasperating factual and logical incompatibilities of things, from the necessity of choice between alternatives of which both are desirable, from the everlasting *entweder-oder des hartnäckigen Verstandes*—this, of course, is a grateful, and may to some temperaments be a needful, relief; and those philosophies which offer it, and especially those

which give what seem subtly reasoned justifications for it, have always been assured, and probably always will be assured, of a welcome. But of all such philosophies, and therefore, in particular, of Hegelianism and its offspring, I early became suspicious—chiefly, I think, under the influence of William James and of the reading of Renouvier, to which he used to incite his students in the 'nineties. Both helped me to realize that the lust to reconcile the irreconcilable is one of the besetting temptations of the metaphysical temperament, one of the dangers against which the philosopher needs most to be on his guard—a temptation the greater and the more insidious in proportion to the many-sidedness of the philosopher's mind and the consequent diversity and intensity of his intellectual sympathies.

This conviction, of course, settled no specific problem. There obviously have been set up, in the history of thought, a number of spurious contradictions which do disappear upon adequate analysis. But the influences which I have mentioned helped to create, or to sharpen, a predisposition which has, I suppose, affected my conclusions on a number of problems, and in particular upon the tenability of absolute idealism. They freed me (I hope) of any readiness to let the attractiveness or "nobility" of any proposed reconciliation of opposites obscure contradictions lurking in it or in the argument for it; and they led me to believe that, in the main, the philosopher's business consists in making choice between alternatives. I did not fail to examine with care such acute and ingenious arguments as were offered by Bradley and by Royce to prove that there is no contradiction in the notion of a *totum simul* made up of successive parts. But Bradley's argument, as Royce himself helped me to see, was only a roundabout way of saying that the Absolute Experience is *not* really made up of the sort of relational (including temporal) experience which is ours; and Royce's own attempt (especially in vol. ii of *The World and the Individual*) to show how it conceivably may be literally so made up seemed to me a failure. (To prove that it was, in fact, a failure would, of course, require an analysis far too lengthy to be presented here.) Nor, I may add, was my conclusion shaken when, long after, Bosanquet, in his *The Meeting of*

Extremes in Contemporary Philosophy, endeavoured afresh to vindicate "the view that the foundational character of all that is, *while containing the infinite changes* which are the revelation of its inexhaustible life, not confinable within a single direction or temporal career, *is not itself and as such engaged in a progress and mutation.*"[1] The greater the dialectical resources bestowed upon the justification of such a conception, the more nakedly did the essential self-contradiction in it appear to me to stand out.

The form of idealism to which I had been introduced by Howison did not, indeed, present this contradiction. While it recognized an eternal as well as a temporal order of being, the eternal did not—for it—contain the temporal. Each finite mind was declared to be, "in one side of its being," an "empirical" existence in time, and, in another side, to "have an eternal reality that did not arise out of change, and that cannot by change pass away"—"eternal" here being expressly defined as the negation of "temporal."[2] That what is experienced as temporal is so genuinely and without any sublation into its opposite was therefore not denied by this theory. Yet even this less paradoxical sort of eternalism I was unable to accept. In the first place the proofs offered for it seemed to me unconvincing. It rested mainly upon Kantian premises. Our possession of a priori knowledge was supposed to imply the existence of an eternal or noumenal Ego as the "source" and ground of all these "connecting and inference-supporting elements in human consciousness." But I could never see the connection between the premise and the conclusion. That at each moment the contents of each individual consciousness have a "unique and not further analysable togetherness" I recognized; and that some factor of continuity, some element persistent or identically recurrent in consciousness from moment to moment, must be assumed, to make our experience of succession and duration conceivable at all, seemed to me evident. But why the fact—supposing it a fact—that we find certain specific judgments "necessary," and therefore are constrained to

[1] *Op. cit.*, p. 210; italics mine.
[2] *The Limits of Evolution*, 1901, pp. xv, xvi.

think them valid for cases of which we have not yet had experience, should be regarded as a reason for affirming the reality of a multitude of supra-temporal or eternal selves, was to me incomprehensible. The apprehension of the necessity is itself always an empirical event having a date in a temporal sequence; and if the necessity apprehended be something both objective and eternal, the eternity, surely, must attach to the logical order—to what Locke calls the "relation of connection and agreement, or disagreement and repugnancy between ideas"—to which the judgment, *quâ* necessary and universal, relates, and not to the function of judging nor to the psychological subject, or maker, of the judgment.[1] If, in short, *any* "eternal reality" is implied by the assumption that we have a priori knowledge, that reality is the world of noumenal objects of Platonic realism, not the noumenal Egos of Kantianism.

Not only did the proof offered for the latter seem unpersuasive, but the conception, when taken in its entirety, seemed impossible. How a temporal experience could be hitched on to an eternal self without infecting the latter with its temporality, I could not, and cannot, see—nor yet how an eternal self could be constantly engaged in temporal acts of cognition without impairment of its eternity. As little did the theory appear to me to have the ethical and religious consequences which were drawn from it, and which, as I could not but feel, were in reality its chief generating motives. It purported to vindicate both freedom and immortality. Because out of time all selves were also out of the causal nexus and thus

[1] Misconception of Locke's position is so prevalent that the quotation from him here will perhaps seem to some readers inapposite. But it should be patent that in the fourth book of the *Essay* his theory is essentially a sort of Platonistic rationalism. We "know," in the strict sense, only when we perceive a logically *inherent* "connection between ideas," and experience is not for him knowledge nor, properly speaking, a source of knowledge. The notion that Locke was an empiricist has arisen through reading his sensationalist account of the "origin of our ideas," i.e. of the way in which "ideas" get into our minds, into his theory of the nature and grounds of *knowledge*. His total doctrine is that the ideas, though they come to us through our senses, come bringing their eternal and necessary logical inter-relations with them; and "knowledge" consists exclusively in intuitively reading off these relations.

undetermined and independent; "relatively to the natural world they are free, in the sense of being in control of it: so far from being bound by it and its laws, they are the very source of all the law there is or can be in it." But even supposing this admitted, such freedom manifestly had no moral significance; it belonged to an abstraction, a noumenal Ego that never acted in time, in which alone moral good and evil subsist—or, if it did so act, became thereby enmeshed, along with all the temporal life of man, in necessity. And inasmuch as the distinctive "empirical character" of the individual was supposed—as it had already been by Kant[1]—to be somehow the expression or temporal unfolding of something unique in the "intelligible character" of each eternal self, this so-called freedom was indistinguishable from the most absolute necessity. Every man is and does what the differentiating *nuance* that makes his supersensible character distinct from all others requires; and this determination from all eternity, and apart from all volition, to be the kind of self that one is, is a blanker, more unexplainable sort of predestination than that implied by the postulate of causal uniformity in temporal phenomena. Similarly, any argument from the "eternity" of the noumenal self to the persistence in the future of an empirical individual existence—which, moreover, was supposed to have *begun* in time—appeared to me impossible. Either the "supersensible self" really was eternal—i.e., without duration or succession in time—or it was temporal. If the former, nothing could be inferred about the duration of the temporal self somehow incomprehensibly associated with it; if the latter, it appeared antecedently as conceivable that any individual entity of this kind should have an end as that it should have a beginning.

Thus both the pluralistic and the monistic type of idealism, though they were presented by teachers of such rare gifts and philosophic power as Howison and Royce, appeared to me equally unacceptable as wholes. Yet one essential contention of the former theory, as against the latter, I found convincing; and this consisted precisely in its pluralism. That there is in the

[1] I am referring to Kant's amazing reasoning about freedom in the *Kritik der praktischen Vernunft*, pp. 224–36.

experience of each individual at each moment something unique and unshareable—that to know about another's experience is never the same as having it—this seemed to me a truth upon which the "multi-personalist" rightly insisted. Monistic idealism —especially in the form which it had when Royce rid it of its usual foggy indefiniteness—seemed to imply that you could take a lump of experience commonly called John's, add to it another lump commonly called Peter's, another commonly called the experience of Peter's dog, and so proceed *ad infinitum*, and thereby could compound a total, called the Absolute Experience, in which nothing that had belonged to any of these component units would be lacking, though much might be added. But something, I think, would necessarily be lacking—namely, that which made the first experience John's, the second Peter's, the third the dog's. An experience, in short, appears to be always a centred or appropriated mass of ingredients; it may have elements in common with other experiences, may be directed upon identical objects, but the "unique togetherness" of the mass in the individual moment of consciousness is a togetherness from a special point of view; and *this* feature of any one experience, though it can be designated in general and abstract terms, cannot, so far as I can see, be actually and in its concrete particularity an attribute of any other experience. Even the limitations or dissatisfactions of my present thought or feeling are more than *mere* limitations. If the Absolute knows my error, but at the same time sees beyond it to the truth, it is not my experience of erring that he is having; and if he is aware of my grief, but at the same time knows that it is transitory and that some joy is to follow, he is not sharing my grief, since of that the very essence is its seeming finality. You can't, I am inclined to think, ever add to an experience without subtracting something; cannot enlarge without also omitting; cannot, even from what is called a more comprehensive point of view, see all the aspects which things present from a more contracted one. This, if true, confirmed the conclusion based upon the considerations respecting time which have been previously mentioned. Both the temporality and the individuatedness of our human experiences forbade the supposition that they can

all be embraced as experiences in any single Whole or be in their immediacy and integrity possessed by any Universal Mind.

But the same two considerations which thus led me to reject absolute idealism seemed to contain a positive implication of great importance. They both assert the separateness, the mutual existential externality, of certain of the parts of reality—externality which in the one case may be called lengthwise, in the other case crosswise. Yesterday's experience is truly contained neither in my to-day nor in any eternal to-day of a Cosmic Consciousness; as little, even apart from the question of time, can my neighbour's life be integrally a part of mine or of that of a Cosmic Consciousness. But I was constrained to believe that I am capable of *knowing* (more or less imperfectly) both my own yesterday and my neighbour's life—not only that there *was* a yesterday, and that there *are* lives not my own, but also something of their content and character. These beliefs are not derived through reasoning; they are not "necessary" in the sense that their opposites are self-contradictory; and they obviously can never be, in the strict sense, "empirically" verified, because they consist in affirmations of the possibility of a knowledge of existents which are not, when known, immediate data *in* experience. But they are beliefs which underlie the whole of human life as it is actually lived by all of us; genuinely to disbelieve them appears to be impossible to man, certainly to those whom we are accustomed to classify as sane. The occasional lovers of philosophic paradox who have professed such disbelief seem to me merely to display an unconvincing affectation. In any case these beliefs were obviously implicit in the temporalism and the pluralism which I had already accepted; and at the same time, when explicitly construed from a temporalistic and pluralistic point of view, they manifestly entailed a definite theory about the nature of knowledge. If there is a real succession of experiences, and if, nevertheless, the experience of one moment may include, or consist in, a knowing of the existence of some prior or subsequent moment's experience, it follows that knowledge consists in somehow "apprehending" one bit of existence by means of another which is not identical with it. And, similarly, if my

fellow's experience—at all events his experienc*ing*—may nevertheless be known by me, the same conclusion again follows.

The acceptance of a temporalistic and pluralistic metaphysics thus carried with it the acceptance of an epistemological dualism. Both intertemporal cognition and interpersonal cognition seem to me to show that, in its very essence, knowing, our most characteristic human function, is an organic process characterized by a potential reference to, an evocation and apprehension of, a Beyond. When we know in these ways we appear somehow to have presented in our experience at a given moment realities which we must at the same time conceive as existing outside of that experience, in the sense (at least) that they do *not* exist at that moment, or that they are experiences (or experiencings) of other selves. To be known (except in the way in which immediate sensory content is sometimes, but, as I think, unfortunately said to be "known") things must—to use a happy phrase of Professor Dewey's—be "present-as-absent"; but since—in the view of a temporalist and a pluralist—a given bit of reality cannot be literally *both* present and absent, knowing must be a function of a unique and anomalous (but not a self-contradictory) sort. It must consist (partly) in the existence, at a given time and within an individuated field of consciousness, of particulars which do duty for other particulars, extraneous to that time and that field; and the former particulars must have associated with them in consciousness, the peculiar—but, as I submit, empirically the perfectly familiar—property which some of the Schoolmen termed "intentionality" and later dualistic epistemology has called "self-transcendent reference." The "intentional" or referential quality of a given bit of content present *now* in *my* cognitive experience is itself an item in the same present experience. For example, the pastness of its date of reference is itself a present and directly experienced quality of a memory-image, which does not in the least mean that in memory the past is directly experienced. "We apprehend the various elements of our presented content as fitting into a framework of conceptualized temporal relations—which, in fact, appear in consciousness, at a given moment, largely by the aid of spatial imagery, as of a

calendar or a time-table. And this temporal framework in which our images appear has a curious twofold relation to our present consciousness. As a datum for introspection, as an existent now given in experience, the framework is *included* in the present content; but at the same time, as a conceived scheme of relations, it logically includes the present moment and its content as a single unit in the larger system represented.")

In cognition, in short, consciousness becomes, in Royce's phrase, "self-representative." A given moment of thought may consist in a representation of a whole world of objects in relations of many kinds—temporal, spatial, logical—in which it is itself, *as represented*, a mere fragment. Thus it is that a given experience, e.g. a memory can cognitively or representatively transcend itself without any existential self-transcendence. The memory-image exists as a transient bit of reality now and at no other time; but it exists in its place in a representation of a more comprehensive whole in which the now is an element consciously distinguished from the not-now. If the notion of "intentionality" seems to some a paradox and a mystery, I reply that, on the contrary, it is a notion obviously entertained by the plain man and by most philosophers in their normal moments. For—to leave the case of memory—when men conceive themselves to be knowing about a future event, or even so much as distinguishing the future from the past, they do not conceive of the future as existent in the same sense as the present. The whole point of the distinction lies in the conception of the future as something not now experienced or possessed; yet the conception of it *as not* now experienced manifestly *is* now experienced. And what is described by the formidable term "self-transcendent reference" is no more (and no less) mysterious than this common phenomenon in the functioning of any creature capable of looking before and after.[1]

My approach to realism was thus through a criticism of the

[1] The theme of this paragraph I have dealt with somewhat less inadequately in a paper on "The Anomaly of Consciousness" in the *University of California Publications in Philosophy*, vol. iv, from which a few sentences above are taken.

idealistic philosophies prevalent when my reflection on these matters began; but this criticism, when its implications were examined, turned out to require, as its positive corollary, a conception of knowledge as indirect and substitutional; it involved, in short, a theory of representative ideas, at least with respect to cognition of past and future events and of the experiences of other selves. And with this the epistemological basis of every sort of idealism collapsed. If knowledge was, in fact, mediate in certain cases, it might conceivably be mediate in others—for example, in the case of sense-perception. There might be reasons of other kinds for accepting a spiritualistic metaphysics; but the citadel of the idealistic position—to change the figure—had always been the epistemological assumption that only the immediate compresent content of a cognitive experience could be known through that experience; even in "objective" idealism this assumption had persisted, but its application had been transferred to the Absolute, who in that theory was the only knower in the strict sense, the sole possessor of genuine truth. But this citadel had now, as it seemed to me, been breached. In the usual epistemological sense of the term, a temporalistic or a pluralistic "idealism" would obviously not be idealism at all; for example, any consistent monadology is clearly a form of realism, since it implies that there are, between two monads, real relations which do not fall within the experience of either or of any third monad. If, then, a *particular* knower at a particular time can truly know realities which do not have their existence within, or in dependence upon, his consciousness at *that time*; and if there may subsist relations, even though they be relations between consciousnesses, which are not in *any* consciousness—then there is no decisive presumption to be drawn from purely epistemological considerations against even physical realism. Meanwhile, a vigorous revolt against idealism had been taking place in other quarters, motivated by other reasons. Some of these seemed to me valid, and therefore reinforced the argument based upon the temporalistic and pluralistic considerations I have mentioned. Especially sound and salutary seemed to me the attacks made by several writers upon the doctrine of the

"internality" of all relations, which had been so important among the logical motives of post-Kantian idealism. This I had already rejected as incompatible with both temporalism and pluralism; but I had not subjected it to the separate and direct analysis which was now brought to bear upon it by others. Nevertheless the theses that were most distinctive, and in some sense "new," in the neo-realistic movements which became conspicuous in American and British philosophy during the first decade of the century, I could by no means accept; and the primary reason for this was the view about the nature of knowledge that was implicit on the grounds upon which I had rejected idealism. The new types of realistic theory were profoundly influenced either by William James's supposed discovery that "consciousness," as distinct from "content" or "objects," does not exist, or by G. E. Moore's supposed discovery, about the same time, that "consciousness" *does* exist, but is entirely distinct from content and is incapable of generating or modifying its immediate data. If either of these premises was adopted, it followed that all knowing is immediate, that the "content" (of consciousness, or the "content" without any consciousness) present in the cognitive experience is existentially identical with the object known. In the words of the authors of *The New Realism*, "there is no special class of entities, qualitatively or substantively distinguished from all other entities, as the media of knowledge. In the end all things are known through being themselves brought directly into that relation in which they are said to be witnessed or apprehended. In other words, things when consciousness is had of them become themselves contents of consciousness."[1] There was some wavering among neo-realists about following out this principle universally; but so far as it was consistently followed out it led to a sort of epistemological primitivism. What was proposed, as the same volume announced, was "a return to natural or naïve realism," which was defined as the "theory which makes no distinction between seeming and being," but holds that "things *are* just what they seem."[2]

Now it appeared to me, for the reasons previously indicated,

[1] *Op. cit.*, 1912, p. 35. [2] *Ibid.*, pp. 10 and 2.

to be certainly false to say that when I recall an event of yesterday, or foreknow an event of to-morrow, or apprehend my neighbour's thought or feeling, these objects of my knowledge literally "become themselves contents of (my) consciousness," in the same way in which my own present sense-datum, or imagery, or feeling, is content of my consciousness. If yesterday's experience is past, it cannot be "numerically identical" either with the present event of my experiencing or with the content which is existent simultaneously with my present experiencing. Attempts have sometimes been made to meet this objection, either by suggesting that a present remembrance need have no compresent content —which seems to me an absurdity—or by conceiving of the past event as somehow actually persisting in the present. With respect to the latter way of evading the difficulty I am in agreement with the remark of Mr. Bertrand Russell: "This is mere mythology. The event which occurs when I remember is quite different from the event remembered. People who are starving can recollect their last meal, but the recollection does not appease their hunger. There is no mystic survival of the past when we remember merely a new event having a certain relation to the old one."[1] In short, a consideration of memory alone would suffice, if there were no other reasons, to lead me, as a "temporalist," to reject the epistemological monism, i.e. the generalized hypothesis of direct knowledge without intermediating "ideas," which is the essence of the "new" realism.

But there are many other reasons. The most important of these is the utter inability of any theory which regards knowledge as always an immediate apprehension of its intended object to account for error and illusion. The fact of error is the acid test for any epistemology; and the implication, in this regard, of neo-realism was all too truly indicated by the early American champions of that philosophy when they identified it, "broadly speaking," with the theory—so "naïve" that no one, I suppose, had ever previously asserted it—which "makes no distinction between seeming and being," but regards objects as "being precisely what they appear to be." The definition did not, it is

[1] *Philosophy*, p. 198.

true, prevent the authors of it from elsewhere recognizing clearly and candidly that the problem of error was for them crucial, and from attempting to find a solution of it which should be consistent with their hypothesis. These attempts are both too numerous —since nearly every adherent of the theory offers a different solution—and too ingenious and involved to be examined in detail here. I must be content, without repeating the reasons which I have tried to set forth elsewhere, to say that none of the attempts appears to me successful, and that any doctrine of direct knowledge must, I believe—precisely so far as it really *is* such a doctrine—be incapable of accounting for error or even of recognizing its possibility.

It is a further implication of the theory that knowing is always a direct apprehension of objects which would be just the same if no cognitive event had occurred, that all data of perception, whether those commonly regarded as veridical or those called illusory, are genuine parts of the physical world. To this conclusion the neo-realist is led, no doubt, by more than one logical motive. The desire to eliminate the duality of "mental" and "physical," at all events with respect to the content of consciousness (in distinction from a possible function of merely "being conscious"), is widely manifest in contemporary philosophy. It is, of course, a natural desire, since, if it could be satisfied, the result would be a great unification of our conception of the nature of things—a unification in realistic instead of idealistic terms. It is manifest, therefore, in other contemporary realists, such as Mr. Bertrand Russell, who reject epistemological monism. But here, too, I have been unable to follow the road which so many philosophical minds of my generation have found inviting and apparently satisfying. To explain the considerations which have deterred me from doing so would manifestly require, first of all, an attempt to define the nature of the "physical world," and then an examination of each of the classes of experienced content which seem to me to resist inclusion in that world, when so defined. It would also require, in order to be relevant to the latest phase of the controversy, a discussion of Mr. Russell's recent ingenious hypothesis that our percepts (and apparently

all other content) are "in our heads," and that, e.g., the bit of what I call "blue sky" which is now present in my visual field is really a part of my brain—a task the more difficult because I find it hard to see how Mr. Russell's general theory permits us to suppose that we have any members properly describable as "heads." These are, of course, too large and complicated undertakings to be attempted here. But if I may assume that membership in the physical world means presence in a single, public, spatial, or spatio-temporal order, in which the laws of physics hold good, then I cannot see how the content of dreams, hallucinations, illusions, or even the contents of veridical perception as the epistemological dualist must conceive them, can be given a place in that world. This does not imply that the existence of these contents is not dependent upon processes themselves physical and conforming to the generalizations of the physicists. But physical science itself would be impossible if such entities as dream-monsters, the dipsomaniac's pink rats, or present memory-images of vanished objects—all with the qualities and behaviour which they are experienced as exhibiting—were placed upon the same footing as "scientific objects." The distinction between the "mental," in the sense of that which *merely* "appears" in an individuated private field of content, and the "physical," in the sense of an independent, orderly, perduring system of entities or "events" having dynamic or causal relations *inter se* of the kind which physical science hypothetically describes, was perhaps one of the earliest, and is still, I am disposed to think, one of the most indispensable of the philosophical acquisitions of mankind. The "bifurcation" of experience, if not of "nature" (the use of the term in this connection is question-begging), is the beginning of wisdom in metaphysics.

This will, perhaps, suffice to convey some very general notion of the primary considerations (though these are by no means all) which have brought me to that position mentioned at the outset, intermediate between the idealism accepted by most good philosophers when my acquaintance with philosophy began, and the type of realism enthusiastically adopted by so many good philosophers during the past quarter-century. Some steps in this

itinerarium mentis have necessarily been omitted altogether. For example, any idealistic reader will have discerned that no *positive* reason has been given for accepting a physical realism; but that is one of the deficiencies which will, I hope, be abundantly made good by some of the other contributors to these volumes. And the temporalistic premise in which the whole process began needs, I realize, much further elucidation, alike with respect to the difficult concept of time itself, to its cosmological implications, the general world-view which it entails or suggests, and to its bearing upon the historic issues of religious belief. But both to express opinions on these further matters and also to present reasons for the opinions is plainly out of the question within the limits of space available here; and the statement of conclusions (on matters about which the views of reasonable men differ) without reasons is manifestly not philosophy.

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A TENTATIVE REALISTIC METAPHYSICS

By EVANDER BRADLEY McGILVARY

Born Bangkok, Siam, 1864; Professor of Philosophy, University of Wisconsin.

A TENTATIVE REALISTIC METAPHYSICS

My philosophical creed is that if ever we are to have an even partially satisfactory philosophy, we shall get it only by the use of scientific methods. The materials to which these methods are to be applied are supplied by experience, not the crude experience of everyday life, but this experience as interpreted by the various special sciences. The interpretation given by any special science to the material it investigates is relevant to that material; but the question of the adequacy of that interpretation when that material is considered as only one aspect of the world revealed to us in experience is one that the special science seldom raises. What the philosopher tries to do is to fit this interpretation into a larger scheme which embraces other aspects of the world as interpreted by other special sciences. Thus the self-imposed task of the philosopher is the integration of the scientific interpretations of the world in which he finds himself. Any step he takes in the accomplishment of his task is precarious; there are too many factors of uncertainty. The special sciences are themselves constantly changing their interpretations, and even at any time the interpretation any science gives to findings in its field cannot be fully understood unless all the facts it investigates are taken into account; and it is only the special scientist who has detailed knowledge of these facts. It thus behoves a philosopher to be quite humble in his attitude toward his results. He should never infallibly know that he is right, and should always suspect that he is wrong. He attacks his problem not because he believes that he can definitely solve it, but because he is interested in it and cannot keep his hands off. He merely hopes that he may perhaps contribute something to its solution; at best the contribution will be infinitesimally small in the ultimate reckoning—and perhaps there will be no *ultimate* reckoning.

For this reason it is wise for the philosopher to content himself with being a philosopher only within very narrow limits. He will attack only one philosophical problem at a time: he will attempt to integrate the interpretation of experience given in some special science with that given in some other special science,

but he will not attempt a wholesale integration. This does not mean that he does not keep a weather-eye open for winds that may be brewing elsewhere. As a philosopher he must have that eye always functioning; but it cannot see everything. It is rather on the look out for something that may be at variance with what he thinks he sees in the immediate neighbourhood.

There are two philosophical problems that have most persistently interested me, the metaphysical and the moral problems. In a paper like this it seems better to confine myself to the former. In view of the direction in which the solution of this problem seems to lie, I am tempted to define metaphysics as the view of the world in which physics and psychology are satisfactorily integrated. Under such a definition behaviourism is metaphysical. The reason it has not recognized its metaphysical status is that for it only that metaphysics is metaphysics which is not its own metaphysics. Behaviourism is, I think, a one-sided metaphysics, which has managed somehow to lose its first two syllables without thereby becoming identical with physics. The works of such men as Whitehead, Russell, and Broad would seem to show that a metaphysician can keep in close touch with physics without developing an evangelical fervour hard to reconcile with an impartial outlook upon the facts of experience. The metaphysics of lip-service to physics, including laryngeal ministrations, may consistently with itself prove to be neither physics nor philosophy, but mere *talk*.

Descartes and Santayana have tried to see how much of common sense they can doubt and yet have anything left. I have been trying for years to see how much of common sense one can *keep* and yet have anything scientific. As yet I have found no conclusive evidence that the space and time found in my experience are not the space and time of physical objects; of course not *all* of the latter, but at least parts of the latter. Whether any of the sensible qualities found in my experience can be regarded as belonging to physical objects is a question that I will touch upon later.

In saying that the space and the time in which I see things are actually and identically the space and the time in which

physical objects have their being, I do not mean to prejudge the question of relativity in physics. Even if the relativist's conception of space-time be accepted, still the space and time of the system to which my *body* belongs are physical, and it is that space and that time that, I believe, can be shown to be the space and time of my *experience*; or rather they cannot be shown not to be. Even if one goes so far as Mr. Eddington in suggesting that "space and time are only approximate conceptions, which must ultimately give way to a more general conception of the ordering of events in nature not expressible in terms of a fourfold coordinate-system," [1] one need not despair of common sense. Four-dimensional space-time does not necessarily annul the difference between space and time; space and time each may keep within the higher unity its indelible character, and each is an order-system, even though each is an element in a more comprehensive order-system. If mathematical physics should ultimately find that space-time belongs to a more general ordering of nature, there is no reason to suppose that it will lose its character in the larger order. Just as the spatial character of a parabola is not lost when expressed in an equation with time as parameter, so if ultimately we shall find it necessary to express space-time in equations with an as yet unknown parameter, it is gratuitous to fear that the spatial and temporal character of space and time will be lost by reason of such equations. Mathematics mistakes its scientific function if it supposes that its equations undo the facts of the experimentalist; correlation is not annihilation.

As a preliminary to showing that the space and time of sensible experience can be identified with the space and time of physics, it is necessary to call attention to a classification of relations which has quite often been ignored. Relations may be *direct* or *indirect*. An example of a direct relation is similarity; an example of an indirect relation is brotherhood. When we say that A and B are similar, we do not *imply* any other relation in which A and B stand. When we say that A and B are brothers, we *do imply* that they stand in another relation, the relation of sonship

[1] *The Mathematical Theory of Relativity*, p. 225.

to shared parents, C and D. Only by reason of their common sonship to C and D are they brothers. Let us call any relational complex in which the terms are indirectly related an "indirect complex." Let us call the implied term or terms of the relation implied by an indirect complex the "condition" of the complex. Thus the condition of an indirect complex is not a member or term of *that* complex: the parents of A and B are not members of the complex "brothers"; they are members of the more comprehensive complex "family," of which the members of the indirect complex are members. The relationship of father-mother to son or daughter is by our definition the only *direct* relation found in a consanguine family.

Let us now take the indirect complex, "second cousins at common law." They are great-grandchildren of common great-grandparents. The latter are the "condition" of the relation of second-cousinship. In general, great-grandparents are not alive when their great-grandchildren are born. In such a case, the great-grandparents do not become great-grandparents until after they are dead, thus reminding one of Solon's happy man. The cousins before they are born do not have great-grandparents, and after they are born it would seem as if, by a logic often employed, they were too late to *have* them. What I mean can be illustrated by the possible answers to the question, "Have you a wife?" "Yes" means "I have a wife and she is *living*." "No" may mean "I haven't and never had one," or it may mean "I had one but she is dead" (or probably divorced). In these cases the present tense "I have" implies that the wife is living and is a wife at the time of the answer. On the other hand, ask a man how many great-great-grandfathers he has, and ten to one, if he likes to calculate, he will begin to count up without noticing the tense of the verb in your question. When it comes to accurate expression, tenses are difficult and treacherous; there are too few of them for precision, and what there are of them must often serve purposes for which they were not intended, with the result that a grammatical philosopher is misled or becomes sophistical.

The difficulty found by so many philosophers in my *seeing*

now what *now no longer exists* is, I think, exactly the same difficulty a man grammatically meticulous has in deciding whether he *has* any great-grandfathers. I postulate that a physical field of vision is an indirect complex whose condition is an organism with an optical nervous system normally functioning and whose terms are material surfaces. The surfaces of physical objects (or events if you prefer) from which light arrives at the same time at the normally functioning eyes of an organism form a collection indirectly related by virtue of their relation to the organism. Vision is the relation in which the organism stands to the indirect complex just described. Vision is not an *act* of the organism or of a mind; it is the converse of the relation in which the objects just identified stand to the organism. If vision were an *act* of the organism, it would indeed be difficult to understand how an organism could see *now* what antedates the seeing. But if vision is the relation in which an organism stands to what initiated (or reflected) the light that on arriving at the eyes of the organism sets up changes in it, it is difficult to understand how vision could fail to be later than the objects (or events) which initiated the light. Just as great-grandparents do not become great-grandparents until a great-grandchild is born to them, so physical objects do not become a field of vision until light from them has stimulated an organism through its eyes. Upon the arrival of light from objects, the organism has vision in relation to these objects, just as a child in being born is born having great-grandparents, not having had them before.[1] When I say "I see physical objects," the verb "see" does not name any act I perform on the objects that I say I see, any more than my having a great-grandfather is an act I perform toward him. I see, in having a

[1] The analogy fails in a point not relevant to our argument: my ancestors were instrumental in bringing me into the world; the objects that eventually have succeeded in stimulating my organism through my eyes did not play any such part, exceptional cases excepted. To see that all this is irrelevant, consider the case of a man who marries an orphan, thereby making two deceased persons his parents-in-law. By his act a posthumous relation comes to obtain between them, the relation of being *in common* parents-in-law. Here there is no question of an existential dependence on either side.

physical field of vision; I don't have it *because* I see. In other words, "to see physical objects" means exactly the same thing as "to have a physical field of vision."

To make this point clearer, let us take the case of a camera in act of photographing objects. Something is doing in the plate of the camera, something consisting in photo-chemical processes. Now the field of the camera may be defined as all the surfaces of physical objects, light from which eventually sets these photo-chemical processes afoot. If the camera be an astronomer's camera photographing a star-cluster, the objects in the field long antedated the processes they now have set going; and those objects did not all at the same time send out the light whose arrival at the same time as the camera makes the changes in the plate which we call photographing the stars. If it be objected that the field of the camera does not consist of the *stars* of long ago that sent out this light, but of the *light now arriving* from those stars, I reply that this is a matter of definition merely. If you wish to reserve the term "field of the camera" for the *light* arriving at the plate, this does not annul the fact that the dynamic relation starting from the stars and ending at the plate divides the objects of the physical universe into two classes, one consisting of the objects in this relation and the other consisting of all other objects. The camera stands to the former objects in a relation converse to that in which they stand to it; and in standing to those objects in that converse relation it has in them a *natural* group of correlata all of which long antedated its having them, and all of which presumably had various physical time-relations to each other. The time and place of its having these correlata are the time and place of the chemical changes occurring in it. The times and places of the correlata it has are not the time and place of the chemical changes it undergoes; each of the correlata had its own time and place.

Now in the theory I propose as to the physical field of vision, the objects "seen" are analogous to the objects photographed. "Seeing" is analogous to the relation in which the camera while photographing its objects stands to the objects it photographs.

In seeing an object, I do nothing to it; it has succeeded in doing something to me. When I see, I am indeed doing, but this doing is not my seeing. The analogy fails *linguistically*, only in that the verb "to photograph" does not, except by implication, express the relation in which the camera stands to the stars while it is photographing them; it expresses the changes taking place in the plate which will later result in a developed negative, whereas the verb "to see" does express the relation in which my organism stands to the stars, and does not express but merely implies what is taking place in my organism.

If it be objected that we sometimes have vision of only one object, and that therefore we may not properly define the physical field of vision as the class of objects from which light arrives at the eyes and starts physiological processes, I am willing for the sake of argument to concede the point. I should then define a vision of that object as the relation of an organism to that *one* object, a relation which is the converse of the relation in which that object stands to the organism in having started processes which finally result in stimulating the organism.

Now a logical definition of a thing is not that thing itself. So our proposed definition of vision is not vision itself. It is possible to define many classes which as classes are artificial. Thus I can classify all the events in the universe into two groups, one consisting of all the events that occurred within the twenty-nine minutes that began forty-seven hours and thirteen seconds after the birth of any of Julius Caesar's ancestors, the events having occurred at a distance from the relevant birthplace of not less than two thousand three hundred fifty-three miles, and of not more than fifty-two thousand three hundred eighteen miles and eleven inches. There is *logically* such a class of occurrences, which of course would have to be defined more precisely if we accept the theory of relativity. But such a classification is wantonly capricious and so far as we know does not correspond to any natural, i.e. dynamic, grouping in nature. On the other hand, the class consisting of all the ancestors of any person is a natural class, corresponding conversely to a certain dynamic cleavage in nature, i.e. converging lines in the

"advance of nature" give rise to a grouping of points of departure *retrospectively* considered. So also it is with the class of surfaces of physical objects that have sent out light that reaches the eyes of an organism at any time.

But this is not the whole story of the naturalness of the latter class. So far as we have gone, the only difference between the physical field of vision and the field of a camera, as we have defined them, is found in the difference between a camera and an organism with eyes. Is this the only difference? *No!* In the case of the indirect complex whose condition is an organism with eyes, the group, in addition to being a natural class considered retrospectively, is a natural group from which all *consideration* of anything takes its departure. In fact, there would be no science of physics and no logical classification were there not in nature such a natural group. Whatever else the physicist is, he is an organism which under proper conditions has a physical field of vision as an integral natural group, and he begins his studies by starting from what is in that field of vision and in other fields similar in character. In other words, such sense-fields are the natural premises of all knowledge, and whatever later passes for knowledge may not contradict these premises. No other groupings which he later comes to recognize as natural may involve the denial of the epistemologically more fundamental natural character of such groups. Groups of this latter sort are first in the order of knowing even though they are late in the order of being: they are the most "primitive" and most natural groups we know. We do not discover them by logical construction; we start from them as the aboriginally given. Later we discover by logical construction how to classify them. Nature has been kind to us in sparing us the futile labour of making a physical universe out of whole cloth. To adopt and adapt a splendid personification from Mr. Santayana (*Scepticism and Animal Faith*, p. 191), Nature says to Knowledge: "My child, there is a great world for thee to conquer, but it is a vast, an ancient, and a recalcitrant world. It yields a wonderful treasure to courage when courage is guided by art and respects the limits I have set to it. I should not have been so cruel as

to give thee birth if there had been nothing for thee to master, nor so fatuous as to think thy task could be accomplished by one who had no foothold in the world to be won. In giving thee senses I give and will continue to give thee parts of that world, as vantage ground from which thou art to advance to thy conquest."

A concept which has become familiar to all readers in the literature of relativity will aid us in formulating our theory, whether or not we accept the theory of relativity as valid. In this theory a spatio-temporal "interval" between any two events has zero-value if it is such that the same ray of light can be present at both events. Thus the event of the departure of a light-ray from the sun and the event of its arrival on the earth have a zero-interval between them, i.e. no interval at all. For relativity this interval is physically more fundamental than the time-lapse of eight minutes or the distance of ninety odd millions of miles separating the two events. Speaking relativistically, we may say that nature in our physical fields of vision includes surfaces which are separated by zero-interval; and the primitive unity of such fields is a unity that does not have to be undone when in physics we come to separate the events into time and space. Nature does not distort herself in giving us all these objects *at once in space-time*; it is we who are responsible for any mistake when later we come to the conclusion that what is thus given is all *at once in physical time*. The philosopher may find the greatest value of relativity in its insistence on the fact that the concept of physical simultaneity is a logical construction which comes about as a result of our operations of measurement of velocities. Physical simultaneity is a matter of definition; it is not a "datum" given aboriginally in experience. Any classification of events as physically simultaneous, if it is to have relevance to observation and experiment, may not make null and void the relation of spatio-temporal "at-onceness" in which events stand as they are given in the field of vision of the observer.

Now in the physical field of vision the events which are at "zero-interval" from the conditioning organism have the relation that

I shall name "visual simultaneity." When I see a star through the branches of a tree, the star and the branches are visually simultaneous, although in physical time they are separated by hundreds of years. There is no contradiction in this statement; those who find such contradiction either regard the seeing as a present *act* which has the star of *long ago* as its *present* object; else they fail to see that physical simultaneity is a matter of definition. Once recognize that the verb "to see" belongs to the class represented by the verb "to relate" rather than to the class represented by the verb "to strike," and the difficulty of the first group of puzzled thinkers disappears. Similarity and posteriority can relate a man to his great-grandfather; in thus relating them they do not do something to the *past now*. What similarity and posteriority can be in the way of relations, there is no logical reason why vision cannot be. It relates an organism to what has physically preceded it. When this relation occurs, the organism is said to "see" the physical objects to which it is thus related. As against those who fail to see that *physical* simultaneity is a matter of definition, perhaps nothing argumentatively effective can be said. They have a self-evidencing intuition that is proof against dispute.

A more mathematical way of stating what we have just said is to assert that what is called physical simultaneity is simultaneity treated mathematically, i.e. an event at any place is given a time-coordinate equal to the coordinates given to certain other events in other places. What I call visual simultaneity can be treated mathematically by a distribution of equal coordinates to a different set of events, the two distributions, however, retaining the same order of temporal sequence. The difference is analogous to the reference of points in a plane to two different frames of reference, one rectangular and the other oblique, both of them having their X-axes and their origins respectively coincident. Except for points on the X-axis, the abscissa of any point referred to one frame is different from that of the same point referred to the other frame; but the difference of reference does not disarrange the serial order of points in the X-direction. Even so the difference between physical time and

visual time treated mathematically is a difference as to the events which at different places shall have the same time-coordinates as the events at the origin; it is not a difference as to the temporal order of the events. It is the same time-order that is visual and physical; but the same time referred to different temporal planes of simultaneity. By a plane of simultaneity is meant all the events at different places which are regarded as having equal time-coordinates. Any plane of simultaneity is logically as good as any other. The two planes of simultaneity, the one physical, the other visual, intersect at the physiological events that condition the physical field of vision. Just what these events are, it is not necessary nor is it as yet possible to state in detail. All that we need do is to say that somewhere along the line of physiological changes, beginning with the stimulation of the eyes and ending with muscular response, the planes of simultaneity of visual time and of physical time intersect.

Before going farther it may be of help to contrast our theory with some others now held. Behaviourists make vision consist in the muscular processes which take place in the organism; our theory recognizes these processes and also their relevance to vision; but it denies that the relevance is an identity. The processes are one thing, the vision another. Without the processes, no vision; but the vision is not the processes. The American critical realists (in general), together with the happily non-American Mr. Broad, distinguish, indeed, between vision and the physiological processes that condition it: for them what is in the field of vision stands in spatial and temporal relations, but the space and time in vision are *not* the space and time of physics; the world of each organism's visual experience is a world of its own, both as regards qualities and seen relations. Mr. Russell takes such a world with all its qualities and seen relations and puts the whole thing in the physical space of the brain of the organism concerned. The view I have been presenting of the physical field of vision is more closely allied to that of the new realist than to any of the others. For instance, Mr. Holt (*The Concept of Consciousness*, p. 182) says: "We have

seen that the phenomenon of *response* defines a cross-section of the environment without, which is a neutral manifold. Now this neutral cross-section outside of the nervous system, and composed of the neutral elements of physical and non-physical objects to which the nervous system is responding, by some specific response—this neutral cross-section, I submit, coincides exactly with the list of objects of which we say that we are conscious." Leave out reference to "non-physical objects" and "the neutral manifold," and restrict the statement to the time and space relations of the physical objects which initiate physical processes that finally stimulate the organism through its end-organs to response, and the statement would express our view quite correctly. But when Mr. Holt goes on to say: "This neutral cross-section . . . is consciousness," I fail to follow. I should rather say that the consciousness in vision, for example, *is* the vision, which, as we have repeatedly observed, is the relation in which the organism stands to the objects in the cross-section defined. This, however, may be a mere difference in terminology.

Before taking up the question of the qualities found in the physical visual field, we must consider some other problems. The physical field of vision is, of course, not our only sense-field. Physical objects stimulate the human organism through many sense-organs. When this occurs there is a physical field of sense-objects including all the objects that have initiated the stimulations. However it may be in infants, whose sense-fields I cannot investigate, my adult sense-field is *unitary*. To call a physical object in such a complex field a *seen* object and another a *heard* object is to imply a belief that the former is in the field because of my eyes, the latter because of my ears. *But the heard objects are in the same space and the same time with the seen objects.* If it is argued that this is the result of laboriously acquired co-ordinations in infancy, the statement may be true; for the sake of argument let us grant that it is true. From such a concession it does not necessarily follow that the space of sight and the space of hearing are originally different spaces. I suppose that infants, as well as grown people, who go to sleep in a *seen* familiar room and wake up in a *seen* unfamiliar one have to do a good

deal of coordinating to get the two *seen* spaces connected into one visual space; and if preliminary coordinating is proof of lack of original identity of the spaces ultimately coordinated, an infant begins life with a good many more spaces than he has sense-organs. Not finding it necessary to have quite so many different spaces and times, I agree with Mr. Russell when he says: "The direct logical importance of investigations into the origins of our mental processes is *nil*." [1] And on that account I find of no logical value practically all the chapter toward the end of which this sentence occurs. Much of this chapter is devoted to the thesis: "In physics there is only one space, while in psychology there are several for each individual"; the thesis is established by appeal to the fact that infants have to coordinate the originally different spaces of each sense-field. Mr. Russell admits that "an immense theoretical reconstruction was required" before the theory of relativity was achieved; and yet he himself accepts the objectively unitary character of the space-time of relativity. What was this theoretical reconstruction but a stupendous coordination. Coordination may result in the *discovery* of unity as well as in the *production* of unity.

When we take into consideration not merely the physical field of vision but any integral physical field of sense, say of vision and of audition, we have a sensible simultaneity of objects, as in the case of hearing the whistle of a not too distant locomotive while still seeing the steam coming from the whistle. In such a case the whistle heard is physically prior to the steam seen. This example shows that according to our theory the relativist's zero-interval cannot be identified with all sensible simultaneity. This is because the relativist deals almost exclusively with what Mr. Russell calls "sight-physics." [2] The correlation of sensible simultaneity with physical simultaneity requires consideration of the varying velocities of propagation from physical objects to the sense-organs of an organism.

But not all objects in a sense-field are sensibly simultaneous.

[1] *The Analysis of Matter*, p. 154. The next two quotations made above are from pages 144 and 195.

[2] *Op. cit.* pp. 160 ff.

Some are there as prior to others, even though some are there as simultaneous with others. The time therein is a stretch of time and not a durationless instant. The sensible stretch of time is what William James signalized as the "sensible present." [1] Unfortunately his description of it contained an inaccuracy which, I cannot but think, proved fatal in that it has led to many mistakes in recent philosophies. The passage in which this mistake occurred is so famous that full quotation is unnecessary. I will quote only one sentence, trusting to the reader to supply the context from memory. Speaking of this sensible present, James says: "We do not *first* feel one end and *then* feel the other *after* it." (I have italicized the words which seem to me to be mistaken.) It is generally just the other way around: we *do* first feel one end and then feel the other after it. For instance, in looking at an electric sign in which the bulbs are successively illuminated I see first one point of light and then another, and then another; while *still* seeing the first I come to see the second; while still seeing these two I come to see the third. The experience is *not* "a synthetic datum from the outset" in the sense that what I see when I see the third is exactly what I saw when first I saw the first. The seeing of all three *becomes* a synthetic datum when the third sign is seen as illuminated. The confusion perhaps arises from the fact that most specious presents follow upon other specious presents, each, when it is, being a synthetic datum.

An analogy will make my point clear. Take a short tube, open at both ends, and pass it lengthwise through water. At any time there will be water in the tube, but some of the water will be just passing into it, and some just passing out of it, while between the two ends there will be water all of which is unambiguously within the tube. But of this water that toward the forward end *entered* the tube after that toward the rearward end; but after it has entered, it is in the tube together with the rest that is in the tube. The water in the forward end is analogous to what is later in any specious present; that in the rear end is analogous to what is earlier in the specious present; all the

[1] *The Principles of Psychology*, I, 608 ff.

water in the tube at any time is analogous to the whole of the specious present at any time; the water lying in any perpendicular cross-section is analogous to what is sensibly simultaneous in the specious present. The priority of any object *in* a specious present with reference to any other object therein is due to its *earlier entrance into the field*. In general the specious present does not come by jumps, each replacing its predecessor *in toto*. There is continuity of sequence. This continuity is just the fact that there is at any time a hold-over to greet a new-comer. It is not continuity as defined by the mathematician. Royce and Santayana, each in his own way, has allowed himself to be misled by James on this point; thus the former got the *totum simul* of the Absolute Experience, and the latter the "speciousness" of the specious present and the changelessness of change.

This character of sensible continuity, with sensible priority, sensible simultaneity and sensible posteriority in the continuity, is doubtless due to the fact that the physiological processes that are the condition of the field have what is called an akoluthic character. They are not physically instantaneous, but have a duration in which they wax and wane. While these processes continue, the physical objects that through intermediaries initiated the processes remain in the field. Here, then, we have an important difference between sensible time and physical time, in addition to the difference we have already noted between physical and sensible simultaneity. The measured physical duration of the physical object may not be equal to its sensible duration. A light-flash that occupies at its source an infinitesimal fraction of a physical second may occupy a second in sensible time. Does this difference force us to say that the two times cannot be identical? Not unless we say that the time in which a dead man remains a father-in-law is not the same time as that in which he lived.[1]

Let us now consider the relation between physical space and

[1] A deceased father of a woman remains the father-in-law of her husband so long as she remains the latter's wife. The father-in-law may have died at the age of twenty-two, and may later *remain* a father-in-law for fifty years.

the space of a sensible field. The classic objection to a realistic theory of sensible space is based on the differences in shape and size a penny has as seen from different points. It is assumed by objectors that a physical penny in physical space is only circular; but the seen penny is rarely (if ever) circular; the conclusion is that the seen space of the penny is not the physical space of the penny. Mr. Broad [1] has stated this objection as forcibly as any one. He distinguishes between the "sensible form" of the penny, which is, of course, a variable, and the "geometrical property" which is exclusively circular, and which is an "intrinsic" property of the penny. The latter can be defined, the former can be identified only by exemplification. Now presumably a definition for Mr. Broad ties down what is defined to *exclusive* conformity with the definition. That the circularity of a penny is a geometrical property of it I do not deny. I cannot, however, concede the claim that it is an *intrinsic* property, if by that is meant a property the penny has without regard to relations in which it stands to other things, or a property it has in all relations to other things. The classical definition of circularity is most obviously a relational definition; the definition tells what a circle is *in terms of measurement by a rigid measuring-rod*, applied in the plane of the circle; Euclidean equality of distance has no meaning except in terms of measurement. The property thus turns out to be *extrinsic* with a vengeance. This is not to deny that the circle has the property Mr. Broad's definition gives it; it does have that property, but it has it only in a certain reference. Apart from that reference, the property is meaningless. Euclid's geometry was largely metrical; but there is a Euclidean projective geometry. The projection of a circle upon another plane is as much a geometrical property of a circle as its metrical properties within its own plane; and its projection on such planes is as much a *physical* property of a physical circle as its "circularity," as the amount of light reflected from a penny in different directions proves. Try it on the camera. As has been often pointed out, the shape of an object is the shape it has where it is, but it is not that shape just by itself without

[1] *The Mind and its Place in Nature*, pp. 170 ff.

reference to anything else; it has, where it is, different shapes from different places. What, for instance, is the "intrinsic" shape of a man's face? The shape it has in profile or *vis-à-vis*? Is a tube round or straight? These and many other similar questions lead one to be very suspicious of "intrinsic" geometrical properties. An "intrinsic" property is intrinsic only when one is so familiar with a standard reference that one uses it absent-mindedly.

What is true of shape is also true of size. Is the sun large or small as compared with the moon? In terms of linear measurement it is vastly larger; in terms of angular measurement made from some spot on the earth as the apex of the angle, it is about the same size. So it is with sizes in general. A man at any distance from you is *physically*, from where you are, twice as small in any dimension as he is when at half that distance. Again, try it on the camera. Our usual method of measurement of familiar objects is by superposition of a measuring-rod; but this is only one way of measuring; and the size got by any measurement is always relative to the way in which the measurement is made.[1]

What has been said in the last two paragraphs is not equivalent to the assertion that a thing has no properties. So far is it from having no properties, that it has many more than any standard description recognizes. It *has* all the properties that *in any relation* it has, but it has each only in the relevant relation. The contention that properties are relative is not the contention that properties are relations, as Thomas Hill Green apparently supposed. Just as a man is a father in one relation and a son in another, without being the relation of fatherhood or of sonship, so an object is big in one relation and small in another without being the relation of bigness or smallness. So much is anything what it is only in relation to other things, that I find it difficult to believe that any one thing *just by itself* could be even that one thing.

It has been urged against the view which identifies physical and sensible space, that when light comes to our eyes through a refracting medium the object is not, in the space of the field

[1] See Bridgman's *The Logic of Modern Physics*, especially pp. 66 ff.

of sense, where it is in physical space; hence the two spaces are not one space. Here we have in another form the same problem. A physical object as a source of light arriving at another physical object is for the latter something that electromagnetically was in the direction from which the light came. In other words, direction in physical space is not just one simple thing. We have accustomed ourselves to a standardized description of physical space conceived on Euclidean principles, and when we find that our description does not fit the facts, we say that the facts are not in physical space. The sensible brokenness of a "straight" stick in water is a case in point. The "new realists" have not wearied of pointing out that in the optical space of the camera the stick is just as much broken as it is in sensible space. Physical space is not a rigid container of physical objects. It is a system of relations, and what holds of physical objects in one of these relations does not necessarily hold of them in some other of these relations. There is no reason for believing that the visual space of physical objects for human beings differs from the optical space of the same physical objects for cameras placed where the human beings are.

We are now ready to take up the question of the seen qualities of physical objects. Is the seen redness of a physical object, for instance, a quality that belongs to the physical object when it is not in a field of vision? Most of the arguments used to prove that it does not so belong are based on the theory that a physical object, if it has any colour at all, can have only one colour at any one spot on it at any one time. That theory is a huge assumption. Colour is a relative quality; it is relative to the kind of light that is emitted or reflected from the coloured object. A "red" object is not red in the dark, nor in a room lighted only from without, whose windows absorb or reflect all the red rays. The same spot of a "red" object may be red from one direction and not from another according to the kind of light it reflects in the two directions. The experience of a jaundiced person proves nothing, since the crystalline lens of such a person may have become temporarily impervious to most of the light-rays. If redness is a physical quality, the red object is red where it is,

but that is not the whole story; it is red where it is *from other places*, as Mr. Russell urges in another connection. The only facts that give me pause when I am inclined to assume that redness is a physical quality that an object would have from the place where an eye is even if the eye were replaced by some photo-sensitive object, are the facts of colour-blindness. If we only knew enough of the physiology of colour-blindness, we could in all probability resolve the question. But I understand that no theory of colour-blindness is adequate; meanwhile, is it not wiser to let the question remain unsettled than to settle it dogmatically?

If it be said, as it often is, that the physicist has proved that physically no object has colour, I should reply with the question: "When and how did he prove it?" In his mathematical treatment of the physical world he *ignores* qualitative redness and replaces it with frequencies of wave-length, *after he has got started* on his mathematical equations. If this be proof, then a surveyor, in ignoring the fertility of the soil or the mineral deposits underneath, proves that there are no such things, when his problem is only to find the boundaries and the area of a plot of ground. What the physicist is justified in ignoring in the physical world is not necessarily non-physical unless we adopt Mr. Russell's convenient definition of a physical object as what physics is concerned with. In this sense X-rays and many other things became physical objects only a short time ago; and so far as we know colours may some of these days become physical qualities.

I am content to leave the problem unsolved for the reason that, unlike the new realists, I do not think that we can successfully maintain that everything appearing in a field of vision is physical. It perhaps will have been observed that heretofore I have spoken of "physical fields of vision." This unusual turn of expression was purposively adopted in view of the fact that there are other fields of vision, as for instance in dreams and in delirium. While I believe that there is every reason to suppose that in normal waking experience the surfaces of physical objects are bodily in the field of vision, there is also every reason to

suppose that they are not always the only things in the field. Visual images are frequently there. I am credibly informed that in some fields of vision with an alcoholic organism as condition there are snakes (or is it *rats*?) as well as physical pyjamas and doctors and nurses, whereas from the fields whose conditions are the organisms called doctors and nurses the snakes are absent, but the pyjamas are present therein. From personal experience I can testify that just now there is in my field of vision a something (much like an old friend of mine) sitting in a chair, and I am sure it would not appear in a field of a camera placed anywhere in the room, although the chair could be made to appear in it. Such a thing I call a visual image.

In such cases I find that the seen spatial and temporal relations between the image and physical things are just the kind of relations that obtain between physical things and physical things. I therefore say that images are in the same visual space and time as physical objects. Why should I not? They are not physical objects, but that is no reason why they should not be where they are seen to be; in fact, it is a reason why they can be there. In general, dealing macroscopically, we say that no two physical objects are in the same place at the same time. This is an empirically ascertained fact, not an *a priori* necessity. But the very same empirical basis that justifies me in saying that we cannot put a physical chair where a physical table is without displacing the latter, justifies me in saying that an image can be where a physical object is without displacing the latter. Shakespeare was true to the kind of life Macbeth was leading, when in Macbeth's field of vision he put Banquo's ghost, shaking his gory locks at him, in the physical "place reserved" for the living general. The difference between physical things and images is not that they are in different spaces, but that they behave differently in the same space. A physical object is to be defined in terms of other relations than the merely spatial and temporal ones. These other relations are dynamical. This is the reason why we say that Banquo's ghost was not physical. If it had been physical, it would have reflected light and thus got into the field of vision of anyone whose

normally functioning eyes were directed toward the place reserved. The question often asked of a holder of my theory, "Why, if your image is where you say it is, do I not see it when I look there?" is very simply and consistently answered by saying that the reason is to be found in the fact that my image is not a physical object and therefore does not send light to your eyes. For the same reason my visual images cannot be photographed and my auditory images cannot be phonographed. The fact that they cannot be recorded by physical instruments proves that they are not physical; it does not prove that they are not where I see them. I cannot see any reason why the space-time which physical objects inhabit may not have as temporary denizens at seen places all the images that all the gentle reveries and wild ravings of men (and of animals if necessary) have found in it. "There may be more things in heaven and earth, Horatio, than are dreamt of in your philosophy." The recognition of them as there does no harm if they are recognized for what they are, such stuff as dreams are made of. They are where they are *as the result* of physiological processes. With regard to them it would seem as if an epiphenomenalistic interpretation would hold. There is no physical reason why an alcoholized physiological organism may not give rise to such physically ineffective and therefore non-physical things as hallucinated snakes or rats which, when they are, are where they are seen to be.

But where did the dream-objects of last night find their place in the space in which physical objects are? I don't know; but if the unconscious victim of an accident is taken to an unfamiliar hospital, can he say, when he comes to, where in physical space he is? Is his inability to say a proof that he is not somewhere in physical space? I rather suspect that the objects of a dream are in the space neighbouring the dreamer's body; but there are sometimes not enough data to make a good map of the locality. An adequate account of the whole matter, including the question as to the whereabouts of Shakespeare's Coast of Bohemia, would take more space than we have left. We may conclude our discussion of this topic by saying that while there

are many problems requiring more detailed treatment, a sense-field in general includes physical objects and objects not physical, all in the same space and time, and *none of them*, in general, *in the brain* of the organism which is the condition of the field. The latter are in the brain only by metonymy; what *is* in the brain is only the physiological condition of their being in the sense-field. They are "functions" of the nervous system, not in the sense that they are nervous processes, but in the sense that they depend on the nervous system for their being, and that they change with changes in the nervous system. They are not "functions" in the sense of being acts that the nervous system performs. The ambiguity of the word "function" has led to many mistakes.

Images are not the only transients in space-time which thus depend on the physiological organism. It is not necessary to list such "functions"; we may name a few. Desires and emotions belong to this class. Specific processes take place in an organism when it desires and when it has emotions; but these physical (physiological) processes are not the only "desires" or "emotions." Physiological hunger is different from hunger as it appears in the field of sense. Theoretically a physiologist with appropriate instruments could discover the former; only the organism itself discovers the latter. In this case certain nerves are stimulated by the processes taking place in the intestines as the result of lack of food, and at some time in the course of the nervous excitation thus arising the quality known as hunger appears in the sense-field. The hunger that I sense no one else can have in his field of sense; he may see my grimaces and my writhings; he may by proper devices discover glandular secretions. But none of these things nor all of them added together are the hunger as it is in my sense-field. There is no profit in discussing the question which of these things is *the* "hunger." That question is merely a lexicographical question; and lexicographically either the outwardly observable facts or the inwardly sensed fact is "hunger." The point is that the proposed reservation of the word "hunger" for what is outwardly observable, if adopted, does not abolish the quality of hunger as it is in the sense-field

of the organism whose physiological processes and secretions can be detected by another.

Unfortunately it is not possible in this paper to deal with perceptual fields as distinct from sense-fields, nor with thinking. The rest of this paper, according to the specifications of the editors, must deal with autobiographical details, stressing the influences which, so far as I know, have been most powerful in determining my philosophical thought. My first impulse toward philosophy was a reaction against theology, in which I had been schooled. Foremost among the positive influences I take pleasure in naming the association I had with Professor G. H. Howison. I have strayed far from the Kantian school in which in his day he was a dominating personality; but, as Nietzsche said, one ill requiteth a master if one remain merely a pupil. I owe to Professor Howison my first living interest in philosophy, and also my acquaintance with Hegel which has proved most useful. Anyone who has studied Hegel sympathetically and thoroughly may violently revolt against his system; but rebels often carry away much that is positive from that against which they rebel. It would be a hopeless task to name the philosophers of the past to whom I owe much. For the last twenty-five or thirty years the debts of which I am most conscious are to my colleagues like Creighton and to my other contemporaries; those to whom I owe most are those with whom I do not find myself in greatest agreement. I had already begun to work toward a realistic philosophy before I became acquainted with the collaborated volume *The New Realism*, but the writings of the members of this group and a paper by Woodbridge helped me very greatly in my subsequent thinking. Perhaps it was William James, whom I met in 1897 when he delivered in Berkeley, California, his famous address, "Philosophical Conceptions and Practical Results," who first of all set me to questioning the satisfactoriness of idealism; at any rate I should name him as the most influential factor in giving direction to my thinking for the next decade and perhaps ever since. Naturally, John Dewey came next in the order of time as well as in the order of power. The persistent criticism with which I have confronted these two men in my

private thinking is the best proof of the influence they have had on me. To pass by the name of Bergson would be to do him a serious injustice without his knowing or caring. Einstein and the relativists, Whitehead and Russell, have been the latest influences. My greatest regret in my present philosophical work is that I have not had an adequate training in the higher mathematics and in mathematical physics. If I mistake not, the metaphysics of the next generation, as that of the seventeenth century, will be in the hands of those who have command of a knowledge of mathematical physics.

In naming my creditors I should be ungrateful if I were to omit mention of my former and present pupils from whom I have learned more than they have learned from me. When "blue books" come in, and I am tempted to assent to the cynicism of the professor who said that a university would be a glorious place to work in were it not for the students, I have only to look back upon my former pupils to see that it is the living contact with young minds that perhaps alone can keep an older mind from growing hopelessly senile.

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CONFESSIONS OF AN ANIMISTIC MATERIALIST

By WM. PEPPERELL MONTAGUE

Born 1873; Professor of Philosophy, Barnard College, Columbia University, New York.

CONFESSIONS OF AN ANIMISTIC MATERIALIST

THE first question of a philosophic kind that I can remember considering concerned the nature of the soul and its relation to the body. Having been informed by my mother that the soul was that which made you laugh and cry and think and move, I asked if you could get it out by boring very carefully up through the foot and leg until you reached it somewhere in the chest. To this question my mother was giving a hesitant and somewhat puzzled negative, when my father broke in impatiently with the warning that I must never think of the soul in that way, that it was not at all the kind of thing that had a place inside the body from which it could be fished out.

I mention this little incident of early childhood because the question I asked then is the kind of question I have been asking ever since, and the reproof for it administered by my father is the same reproof that I have received many times from my teachers and colleagues in philosophy.

I feel myself to be a thing in a world of things. And the thing that I am does not seem to me to be the thing that my body is. The two are alike in being substantive rather than adjectival. They are alike also in being agents and patients in space and time, but they are contrasted with respect to the laws and processes pertaining to them. The intimate union in existence of these entities so disparate in essence has become to me ever more mysterious. All my thinking has been oriented with regard to the psycho-physical problem. And blessed or cursed by this "animistic complex," and goaded on by it, I have sought continuously for an intellectual theory that will bridge a dualism imposed upon me by feeling or intuition and increasingly confirmed by the evidences of experience.

Next to the metaphysical question of mind and body there came, and continued, the religious problem. Church services in the early morning with my mother gave me a poignant sense of the beauty of the Christian doctrine. Sunday-school and the atmosphere of a small New England community gave me an equally poignant sense of the falsity and incredible ugliness of

the authoritarian and ascetic aspects of that same doctrine. Cool, condescending approval or an equally cool and tolerant contempt, which are the usual alternative attitudes toward Christianity that are prescribed by the "genteel tradition" in American philosophy, have never done justice to its baffling mixture of what is best with what is worst. Love and enthusiasm for one half of the Church, righteous hate and contempt for the other, are sternly called for.

Somewhere between twelve and fifteen I read Bellamy's *Looking Backward*, Abbott's *Flatland*, and articles on theosophy by Blavatsky and others. Bellamy, in addition to making me a socialist, made me realize that the business of the good life was an institutional as well as an individual affair. *Flatland* and the theosophy stimulated and made more explicit what might be called my metaphysical interests. The characteristically theosophic attempt to explain the mind and its doings in terms of material or pseudo-material categories appealed to my animistic attitude, and seemed to me then, as indeed it does now, to be the most delightful of pastimes.

It was not until the middle of my sophomore year that my formal education took on significance. I suddenly found myself suspended from college, and very miserably I made visits to my various professors to get instructions for the enforced period of home work. Josiah Royce, whose course in the History of Philosophy I had been taking with some real interest, received me kindly, and inquired what I planned to fit myself for. I replied that I didn't know, but supposed that I should have to be a lawyer. Whereupon he asked me encouragingly if I had ever thought of the academic career. I never had, and I hardly knew the meaning of the phrase, but the fact that here was a great man showing me sympathy and faith in my dark hour stirred me unforgettably. By hard, eager study I passed well the final examination in his course. It had opened a new world to me. Everything was changed, and I was happy. In my Junior and Senior years in college, and in the three years in the graduate school that followed, I gave my whole time, so far as I was allowed, to philosophy. The classes suddenly ceased to be

tedious interludes between parties, and became themselves the most exciting of parties.

Everyone knows the extraordinary company who dispensed philosophy at Harvard in the late 'nineties: Palmer, James and Royce, Münsterberg and Santayana. Each of them had a distinctive philosophy, and each of them preached it with the force of conviction. Their methods of teaching were almost as different as their viewpoints. Palmer's lectures were incomparably the most finished, both as to content and to form, of all that I have ever heard; and whether because of, or in spite of, their literary perfection, their pedagogical effectiveness was extraordinary. I had the good luck to be his assistant or reader, and so had an opportunity to see the progress in philosophic comprehension made by the large group of undergraduates in his course, each of whom was required to submit four papers during the year. Quite apart from this ideal of pedagogical technique, and in addition to many specific illuminations, I owe to Palmer the realization that a naturalistic relativism, as regards the varying *content* of the good, is quite compatible with a Kantian rigorism as regards the invariant *form* of right or duty.

The classroom lectures of James were in striking contrast to those of Palmer, and, indeed, to the polish of his own formal papers. He would utter his thoughts spontaneously, just as they came. As a result his talks were most uneven in quality. The roughness and irregularity were, however, more than balanced by the simplicity and directness of his conversational manner. It was an inspiration to see and hear a great man work out his own thoughts in the presence of his students. The informal and colloquial speech coming from a scholar and a genius possessed a peculiar piquancy. I have seen him stop in the middle of a sentence with some such remark as: "By George, Mr. Smith, perhaps you were right, after all, in what you said a few minutes ago; I had never really thought of that." Mr. Smith thus honoured, would, of course, become the envy of all of us and the devoted slave of his master. Nor would he realize that James, with characteristic and unconscious generosity, had probably

read into his comment a richness and meaning of which Smith himself had been quite innocent.

The parts of James's philosophy that concerned his Pragmatism and Radical Empiricism left me uninterested or actually repelled, but to the more mystical and less explicitly developed phases of his thought I owe much. His conception of the subconscious and hidden energies of men, his Transmission hypothesis, his defence of indeterminism and of a finite God, I greedily accepted. Taken in connection with the Tychism of his friend, Charles Peirce, they furnished me with a large part of my philosophic faith. For Peirce himself I had a kind of worship. While his intellect was cold and clear, his metaphysical imagination was capricious, scintillating, and unbridled, and his whole personality was so rich and mysterious that he seemed a being apart, a super-man. I would rather have been like him than like anyone else I ever met. And on the two or three occasions in which he carefully criticized and then praised some of my student writing I was transported with happiness.

It is to Santayana especially that I owe my realization of Plato's truth. I took his courses at about the same time that I read Huxley's *Evolution and Ethics* and Stevenson's *Pulvis et Umbra*. In all three the teaching was to the effect that value did not depend on existence, nor right on might, nor ethics on religion. An atheistic nature red with tooth and claw could in no sense absolve man from his obligation to actualize ideals of beauty and goodness; nor could it deprive him of the consolation of knowing that those ideals were always and eternally there, be the world what it might. The fact that I did not share the pessimism of Huxley and Santayana as to the existing world in no way lessened my debt of gratitude.

Another thing I got from Santayana's courses was support and confirmation of my temperamental belief in a world of substances. Hegel's hideous slogan, "Not sub*stance*, but sub*ject*," so fertile in sterilities of every kind, had been pretty generally adopted by professional philosophers, and it was a relief to hear Santayana, who had gone through that epistemological hell with his common sense unscathed, talk delightfully and quietly about

the various substances of which the world might conceivably be composed.[1]

It was, however, to Josiah Royce that my debt was greatest, though in another sense it was also least. He taught me almost all that I know about the world's great philosophers, and yet in his own philosophy there was hardly anything that seemed to me true. His lectures on the history of metaphysics were glorious affairs. He not only made the various systems clear in themselves, but he portrayed their inter-relations so luminously and with such originality and depth of insight that the whole course of speculative thought was presented in a series of magnificent vistas and then given the unity of a single great picture of the human mind objectified. He had an unexampled power of making abstract ideas concrete and almost sensuously vivid. It was the ideas themselves rather than the biographical details or even the identities of their authors that he emphasized; and I think all his students were impressed with the fact that, however it may be in other history, in the history of philosophy, at least, it is not the *who's who* but the *what's what* that really matters. I not only got from Royce my knowledge and appreciation of philosophy, but I got from him the kindest and most painstaking assistance in working out my own philosophic problems. He gave me this technical help through my five years of advanced study, and he accompanied it with continuous personal interest and affectionate counsel. He had, moreover, started me going, and trusted me when I was down and out. I owed everything to him, and it seemed mean and disloyal for me not to become his disciple. He was my dear teacher, and I longed to call him master, but I couldn't because his idealistic premises seemed to me false. Despite this I felt the tug of the will to believe wherever I could find elements within my teacher's philosophy that did not seem definitely false. And in a system so rich there were, of course, many such elements. I remember particularly the hypothesis about the varying time-spans in

[1] My first philosophic article, "A Plea for Soul Substance" (*Psychological Review*, November 1899), was written with his kind advice and encouragement.

nature put forward in the second volume of *The World and the Individual*, and how I jumped at it with almost tearful gratitude as a clear good thought that might even be true. For it was a new and interesting contribution to the great pan-psychist tradition. It could be studied and appraised on its own merits in the light of what was known and guessed about the world. And it did not in the least depend upon the monstrous premise on which the rest of the book was based, that that great nature, in which we are such recent and humble participants, is itself the product of our social consciousness and of the funny little techniques of communication which we have developed.

My doctor's thesis, formidably entitled *An Introduction to the Ontological Implicates of Practical Reason*, was suggested by Kant's *Critique* and by Hegel's *Phenomenology*. Sheldon and I worked a great deal together, and we each felt that the principle of *negativität* was inadequate to the great enterprise of categorial deduction which, translated into modern terms, meant the search for a principle of hierarchical organization in the domain of subsistence or essence. We were cheerfully confident of being able to remedy the defect. Sheldon took the principle of the *Self-Repeater* and I took the principle of growth or increase, perhaps suggested by Bergson's *durée* to which James had introduced us. Royce christened my principle the *Pleon*, and helped me with his customary generous kindness to lick the thing into shape. I supplemented my revision of the Hegelian deduction of the categories with an adaptation of Kant's treatment of the sense of duty as revealing a reality more ultimate than anything contained in the world of sense-perception, and attempted to show that in the experience of moral obligation the Pleon revealed itself in its true colours as the principle of reality itself. The thesis was long, and must have been pretty awful as judged by contemporary standards; but it was fun to write, and it got me the degree.

The following year I secured my first regular job under Professor Howison in the University of California. Howison, like Royce, had a variant of post-Kantian idealism, but it was more original than Royce's, though not nearly so well organized and

supported. It was a sort of Fichtean monadism in which God was no Absolute, but merely *primus inter pares*, and the world was the phenomenal manifestation of the society of eternal persons who, by timelessly recognizing one another and one another's recognitions of one another, etc., *à la* Leibniz, created the time process and generally kept things going. The pluralism was in refreshing contrast to the anthropophagous absolutes of Royce and Bradley, and to its author, at any rate, it had come as a genuine *apperçu*. He preached it with fiery and unflagging earnestness, and so great was the force of his personality that people all over the Pacific Coast began and have continued to study the philosophy of German Idealism. The spirit at Berkeley was very different from that at Harvard. Under Howison, philosophy was not a fencing-match in which friendly gentlemen exchanged playful thrusts and courteously applauded their adversaries. It was a grim thing of life and death for the soul, a veritable religion in which either you were orthodox (Howisonian), or you were damned. I with my realism was mostly damned, and would have been completely had it not been that Howison was really two persons—a grand inquisitor who would burn your body to save your soul and also one of the kindest men alive. I was lucky enough to win his affection and not only his professional condemnation, so for four years he kept me on, scolding me angrily for my rotten views and even warning his students against my courses, and then, together with dear Mrs. Howison, showering me and my family with every sort of friendly kindness and material help.

It was for me a strange, hard-working time, and in striking contrast to the dreaming and brooding years at Cambridge. I learned to teach, and found I could do it all right, which was a great relief, because both I and my Harvard teachers had had grave doubts about my being able to. I formed a friendship with Overstreet, who was at that time devoted to the study of Plotinus and in high favour with Howison, and that helped me as it has ever since. I took two interesting courses, one with Professor Slate in physics and one with Professor Stringham in mathematics. The course with Slate was a splendid one, and started me reading

hard such books on science as I could understand. Stringham's course had an even stronger effect. He was a man much like Peirce. He had a Pythagorean sense for the things that really count, and a Lewis Carroll humour. I had no ear for music, but I think I got from his functions and series the kind of experience that musicians must get from their music. The numbers had always had for me an almost pathological fascination, and an almost tangible objectivity. (To regard the number 37, for example, as the product of a human mind, a result of the counting activity by which we reached it, seemed not only false but idiotic. The numbers stand in vast and infinite array with all their still more multitudinous inter-relations full of unending and delightful surprises. They are what they are, and must through all time be what they have been, more steadfast than the stars and more clear and beautiful than existing things can ever hope to be.) It would be easier and less absurd to suppose that Baedeker had by his descriptions created the Jungfrau at which I am now looking than to suppose that the ephemeral mathematicians of this planet create by their technique of procedure the timeless truths which they discover.

Stringham's course revived all my old interest in mathematics, and the result was disastrous, for I became an addict and began to neglect my philosophy in order to play amateurishly with the new problems. Cardan's solution of the Cubic seemed intolerably complicated, and I got the feeling that the ease with which equational knots of any degree could be tied must mean that an equally general formula for untieing them must exist. On that presumably hopeless quest I spent days and nights undissuaded by the kindly warning of my mathematical colleagues that the general equations of even the fifth degree had been actually proved to be insoluble by the ordinary methods which I was using. Then also there were the several simple-seeming series for the summation of which no formula had yet been found; and always, and best of all, there was the ancient lure of the primes. I suppose it was vanity or laziness or an unacknowledged distrust of my own competency to master the real stuff I needed that prevented me from fitting myself by serious study for this

new game. I preferred instead to wait until the house was quiet, and then like a secret drinker unlock my cupboard and take out with guilty joy, not the good little black bottle, but the nice blank book in which I kept my scribblings, and hold high revel with myself through the night, exploring the lovely grottos in which the roots of my equations lurked, bound by mysterious threads to combinations of the known and visible coefficients on the surface up above. In the more than twenty-five years in which I have indulged this vice I have discovered—at least I think I have discovered—a few odd and pretty things, though certainly not enough as yet to justify the hours filched from philosophy.

In spite of this disastrous by-product of my work with Stringham, and perhaps partly because of it, but still more because of the course with Slate and the reading which grew out of it, (I began to take realism with a new seriousness. Science was discovering most exciting things. With the atoms being not only arranged in families, but actually caught and counted, it seemed a piece of pedantic insolence for philosophers who knew nothing of the new work, and cared nothing for it, to label the atoms and their electronic constituents as "vicious abstractions from the organic unity of experience," or similar barren nonsense. If philosophy was to play its historic rôle it must acquaint itself with the new truths and exploit whatever speculative possibilities they contained.) Idealism began to seem to me, not just a falsity to be neglected, but a positive menace debauching the minds of the youths who studied it. There was need for a definite campaign to deliver philosophy from the fog of confusion that threatened to obliterate it. This feeling as to the increasing importance of getting the epistemological situation properly cleared up, not as an end in itself, but as an indispensable prerequisite to a worthwhile philosophy, made me glad to accept the call to Columbia in 1903.

The new place was quite different in atmosphere from either Harvard or Berkeley, and wonderfully stimulating. Sheldon was there, and we could resume both our golf and our duets in ultimate romantic metaphysics. Woodbridge was as realistic as I

was myself—perhaps more realistic—at least as concerned the world of concrete existence. And it was almost disconcerting to find that what had for so long been my daring and dangerous heresy was now taken by the head of my department as a mere matter of course. And yet there were moments even in those early days when I had misgivings that the new realistic accord was itself not so close as it appeared and as I wanted it to be. For Woodbridge seemed to have nothing of that inner veil of sensation through which we all must pass to reach the outer world. When a distant star would hit him in the eye with its light, his body would bow or gesture in the direction from which the light had come; and he would say in effect: "*That* is my perception of the star—*voilà tout*!" What could it mean to identify the publicly observable bodily antecedents and consequents of an experience with the experience itself, the latter being obviously private and not observable by others?

It was the first case of acute behaviourism that I had seen, and the first, I believe, that existed. To believe in the outer world was indeed very good, but to purchase that belief at the cost of denying the inner world was too high a price even for realism. The baby had been emptied out with the bath. But even though the theory were as queer as it seemed it was original and never put forward before. And in philosophy, at least, we should do everything once. So I was not very much troubled if my friend, for some unaccountable reason, chose to make believe that his own sensations were non-existent. Moreover, Descartes had tried this theory on the animals, and it was a pretty sporting thing for a man to be willing to try it out on himself.

Under the stimulus of this new and, to me, delightful association I changed from the representative or dualistic theory of perception to a presentative or monistic theory. Not that I ever doubted the existence of my own mental states and their location inside my skull, but I got to believe that the objects immediately present in perception were not those states but their meanings or implicates, which as such could coincide (though they need not), not only in essence, but in position and date with the things and events in the extra-cranial world. The states that do this

revealing are not themselves revealed. They are not motions, but they are describable in physical terms. What kind of event it is that can reveal events at other places and times than its own is one phase of the psycho-physical problem. That intracerebral states can and do reveal without creating such events is sufficient for epistemology.

Beginning about 1910 there came the association with Perry, Holt, and the others which resulted in the publication of *The New Realism*. We set out with high hope of success, confident in one another and in the sympathy of our big brothers in Europe, Russell, Moore, and Meinong. We wanted, first of all, to introduce into philosophy the two methods that had been so profitably employed in science: the method of co-operative work and the method of isolating problems and tackling them one by one. And in addition to these methodological policies we had (at least so I thought) several epistemological theses which we all believed to be true and which we intended to establish.

To me, at least, these theses committed us to no decision as to the more properly metaphysical issues concerning the ultimate nature of the world, or even of the nature of mind and its functions. On these latter questions I was pretty sure that I was not in agreement with my confrères, except possibly with Pitkin. Our realism was thus not a philosophy; it was rather a prolegomenon to philosophy and a declaration of independence that would make it possible to investigate the nature of things on their own merits without dragging in the tedious and usually irrelevant fact that they could be experienced by us.

But even within the domain of epistemology, or closely connected with it, there were incipient differences that were destined soon to loom large. The cognitive function was interpreted by Perry and Holt, as by Woodbridge and Watson, to be nothing more than a "specific response," i.e. a motion of the organism, or some part of it, elicited by a stimulus. For reasons already stated this seemed to me preposterously false. Magnify the importance of bodily movements as much as we please, they can never be other than north or south, east or west, up or down, or in directions intermediate to these. But the peculiar *rapport* between

an individual and the objects of which he is aware extends to past and future and to the realm of the abstract. And it is impossible for the body to move in the "direction" of such entities. But what is perhaps an even more serious difference between my neo-realist colleagues and myself has developed in recent years. The objects which appear in distorted illusory and hallucinatory experience, which were always for me, not existential, but merely subsistential complexes of essences that could not on reflection be believed to be in real space, however vividly they might appear there at the moment of perception, have been given an existential status by most of those calling themselves neo-realists. The result is to make of the space in which we live and move a dumping-ground for all the contents of dreams and illusions, actual and possible. Any space would crack under such a strain, and of course "neo-realist" space has cracked and broken up into a series of "private spaces" and a "public space" as a construct of each individual. Are there as many public spaces as there are individuals who construct them? Do they interpenetrate completely or partly? Or are they mutually external and side by side in a super-public space which is not a construct? These last questions must also be asked about the private spaces. And *where* were the individuals who construct public space before they did their constructing, i.e. when they were babies or embryos? I would rather be an idealist, at least a Kantian idealist, than swallow any such mess. For Kantian space, even when reduced to an a priori form of perception, could still keep up, though in straitened circumstances, a semblance of Euclidean respectability and enjoy a dignified priority to its own contents.

It seems to me to be a certainty that the things of which the existing world consists must at each instant have ultimately univocal positions, regardless of all of the conflicting perspectives in which they may appear. And if we make temporal cross-sections of these things, as we always can, and thus treat them as histories or continuous series of events, and accept in addition the Special Theory of Relativity, the situation is not essentially altered; for though in that case space and time will have become inter-

dependent aspects of the single four-dimensional continuum of "space-time," yet even so each event will enjoy a univocal "date-locus" or absolute "position" in the new continuum. How otherwise could the events be unambiguously inter-related by the Eddington "intervals," which are to remain invariant, regardless of the perspectives which vary with the motions of the systems from which they are taken? Nor do the spaces and times of even these varying perspectives include places for hallucinatory contents. Relativity to the photographic plates on moving systems is not relativity to the apperception-masses of the men suffering from nightmares or delirium.

If neo-realism is to mean an ontological equalitarianism in which existential status is to be accorded to every content of perceptual experience, whether veridical or illusory, then such a theory is not *realism* at all. We may give new names, such as "sense-data" or "sensa" or "sensibilia," to the rabble of experiential contents, and insist piously on calling them "physical" in every sentence; but they are not properly physical, for they are not properly things at all. They are not agents and patients; they cannot go under their own power; and, worst of all, they are totally incapable of orderly arrangement in a single *milieu*, whether a space or a time or the space-time of Relativity. They are, in fact, nothing but the well-known adjectival sense-impressions of Hume and Mill and Mach and Pearson masquerading under fancy appellations. And in treating them as the sole constituents of the world of existence, the New Realism has surrendered unconditionally to the old phenomenalism.

These sad trends of behaviourism and positivism, which have taken place in the last ten years and which I have attempted to describe, spoiled my interest in the movement from which I had hoped so much good would result; and once more, as in the old days at Harvard and at Berkeley, I am left without a party.

My general ethical theory had developed smoothly into an articulate conception of what I had always vaguely longed for. The good life was the most abundant life. Happiness was increment of psychic substance—fulfilment of tendencies and capaci-

ties. We should seek a maximum of it and a minimum of its opposite for all. Courage and sympathy were the means to that end. They were the intensive and extensive coefficients of righteousness and the only primary virtues.

As to the religious question which had from the beginning been my second philosophic interest, I felt that my views were crystallizing into a fairly coherent structure. And this structure was based upon two postulates:

1. The Problem of Good is insoluble in terms of the traditional Atheism.

2. The Problem of Evil is insoluble in terms of the traditional Theism.

There seemed to be too much of goodness and purposiveness in the world to be the outcome of blindly or mechanistically determined particles; but also too much evil and inconsequentiality to be compatible with any power at once omnipotent and benign. There must be a God, a force or trend upward, to account for the more than casual amount of goodness in existence, and there must be a tremendous limitation in such a power to account for the evil. The finite Deity of Mill and James was thus indicated, both on grounds of metaphysical plausibility and of ethical satisfaction.

When, however, we consider, not the processes of the Universe, but its structure, we must recognize that the only chance for the existence of anything worthy the appellation of Deity must turn on the possibility that the cosmos has a life and mind of its own over and above the lesser beings included within it. In the old and unattractive words we may ask: Is there any likelihood that the world is an animal? Can the sprawling galaxies conceivably possess that degree of integration and organicity which would constitute them an adequate vehicle or external manifestation of a unitary and personal experience? To this question I could give an affirmative answer. Not with certainty, but yet with high probability, we may believe that the enduring unity of the whole is more rather than less than the transitory unities of its parts. Such a Being would, like other beings, possess

an "environment" which would, however, be internal rather than external, and would consist of its own confused and recalcitrant constituents: "that in God which is not God." Encompassing this unitary totality of existence there would abide the eternal Logos, or totality of subsistent possibles, of which the actual world is itself but an infinitesimal fraction—an indeterminate and ever-changing precipitate of compossibility, the resultant, so to speak, of a struggle for existence on the part of the essences. The will to good, or the tendency toward harmony, would be but one essence among many; but its intent to inform the stubborn and warring parts of the universe with the harmony and unity of the Logos would give it an advantage over all other less eirenic tendencies. And the epic of cosmic evolution would consist in the uncertain, imperfect, and interrupted, but generally progressive, leavening of an infinite chaos by the element in it of divine love and good. This little yet perfect thing working in the heart of all things we can symbolize as Prometheus or as Christ, the finite will of a God whose essence and substance are all-comprehending and infinite.

I am painfully aware, not only of the inadequacy of my language to express this Leibnizo-Peircian theory, but of what will appear to my colleagues as the antiquated and fantastic character of the theory itself. And I am equally well aware that no such theological system of hazardous and far-flung speculation, were it a thousand times more skilful and plausible, could constitute more than the intellectual husk of religious experience itself. The feelings of loneliness, insufficiency, and terror are the real drives that generate religion. The ancient and pathetic hope that the world is somehow kin to us, and that the things for which we care most are not ultimately at the mercy of blind and indifferent forces, impels the search for God. And when this hope is reinforced by a mystic sense of being sustained by something sweet and quick, not of us, but very close to us, we have enough to justify the attempt to reconcile the need of our heart with the cold and meagre knowledge of the facts of existence.

Of far greater importance to me than the beliefs on epistemology, ethics, and religion, the nature and genesis of which I have

been describing, was a certain conception of the nature of the mind and its relation to the body which came to me in a curious way, and which has seemed to me to constitute the solution of the problem which of all problems had interested me most. I have tried in four or five articles to present and defend the hypothesis in question, but my failure to convey to my friends my own conviction of its truth and importance warns me that I shall probably fail also in this new and necessarily brief account of the nature of the theory and the manner of its genesis.

In my second year of teaching at Berkeley I had been using as textbooks Höffding's *Psychology*, Pearson's *Grammar of Science* and the *Critique of Pure Reason*. In Höffding I had come across a reference to Lotze's comment on Herbart's doctrine of degrees of intensity in mental states. I do not remember the exact point of the matter, but it had been haunting my mind, and I had commented upon it to my class. In Pearson I had been struck with a statement to the effect that whether the analogy between sense-impressions and forms of strain was anything more than a mere analogy he would leave undetermined. In my course on Kant we had been dealing with the "Analogies of Experience," particularly the one concerned with intensive quantity. At the close of a morning in which the discussion in the Kant class had been especially lively and profitable, I was walking home to lunch in fine spirits and full of satisfaction with the students and with the work that we were doing together. Suddenly I got the strangest experience; and if in my attempt to describe it I make it seem silly or even meaningless, I can only ask the reader's patience on the ground that, however preposterous he may find it, it has meant more to me than anything else that has happened in my life. The feeling came as I was crossing a little brook; and it was as if I could look into and down through each point of space and perceive a kind of well of indefinite depth. The new realm was like a fourth dimension in that it was perpendicular to the three dimensions of space, and yet as contained within each point it seemed to be a lesser thing than a spatial dimension. I described it to myself as a "hypo-space," a realm of negative

dimensionality or essential fractions of the punctiform units of an extensive manifold. It seemed to be the domain of intensity and density, so that if I thought of a continuous solid being diminished in its extent until it had shrunk to a point, that would not be a zero of mass magnitude, for each point of a solid must be as different from a point of empty space as a finite sphere of solid is from the same sphere of empty space. After you reduced matter to points, each of those solid points would have to *wane* or *fade down* in density or intensity in order to reach the true zero of mass. The first implication or application of my *apperçu*, if I may dignify to that extent my novel experience, was the realization that there was room inside a point for a whole microcosmic intensive replica, though in a curious inverted form, of the extended macrocosm outside; and that the elements of that intensive replica would have, on the one hand, a privacy and invisibility, and, on the other hand, a unity and organicity which, while preserving the plurality of specificities, would permit of their being superposed upon one another rather than placed side by side as in extensive pluralities. The different elements would occupy the same place just as a shape and its colour, or a tone-magnitude and its pitch. The second reflection it occurred to me to make on the new conception was that whenever a motion or stream of kinetic energy was checked and transformed into a potential state of strain or stress, the place of that strain and of an indefinite number of further strains that could be successively superposed upon it was the new dimension that stretched in and "down" through each point of space. It was because of this beautiful and unsuspected hiding-place for energies that they were enabled to pass into the seeming nothingness of mere potentiality and emerge again with all their specificities unscathed. And then, putting these two sets of reflections together, it came over me suddenly that I had discovered the real nature of the psychical and the manner of its relation to the cerebral matrix in which it was so elusively located. I had found the way in which sensations were produced at the points in the brain where the neural currents were transformed into potential energy prior to their re-issuance as motor responses. I had found

the place where an indefinitely rich system of memories could be piled up as traces left by the sensory currents during the potential stage of their journey. I had found how it was that a sequence of successive moments, mutually exclusive in the physical order, could nevertheless be felt as a solid chunk of duration extending back and down into the past, the "specious present" or *durée real* of Bergson, which more than anything else differentiates the mental from the moment-to-moment reality of a physical system. I had, in short, discovered the soul in its hiding-place, and not indirectly through dialectical inference, but concretely through an intuition. I walked off the little bridge on which I had stopped when the thing came on me and went home in a daze of ecstasy.

The ideas initiated by the strange experience that I had undergone have persisted up to the present, and despite the epistemological, sociological, and religious interests to which I have referred, my dominant philosophic purpose has been to make clear to myself and others the full meaning of what had been revealed in my intuition while crossing the brook. To the fulfilment of this purpose there have been obstacles—in particular, my own self-distrust. I knew that I had the taint of the circle-squarer deep in me, and that fantastic analogies were apt to seize on my mind and gain an importance and a fascination far beyond their logical value. Perhaps it was because of my weakness and tolerance for the fantastic that the various pseudo-philosophic cranks, who are always appealing to universities for academic endorsement of their wild schemes, were usually referred to me by my colleagues in philosophy and psychology. I recall one poor lady who had accepted as a commonplace and established fact the crazy notion that every name had a "vibration rate" which, by a sort of sympathetic magic, controlled the object named. Her own original addition to this nonsense was the great theory that the word "vibration" must itself have a vibration-rate which, could it only be discovered, would be a potent control over the whole universe. I proceeded, as in less acute cases, to disillusionize her gently but firmly as to any hope of academic encouragement for her theory. As at last she turned

to go, I noticed the stricken look begin to fade from her face and the horrible secret smile of the paranoiac gradually triumph over the hurt. I felt an eerie goose-flesh shudder on my own part, and suddenly the memory of John Bunyan came to mind, and I thought, "There, but for the Grace of God, go I"—and perhaps there I do go anyway. Was it not terribly possible that my own gorgeous intuition might turn out to be of the same pitiful tinsel stuff as that of the vibration-lady whose idea I had just sentenced to a well-deserved death?

In the more than twenty-five years that have elapsed, my theory has developed through four successive stages, psychological, epistemological, biological, and cosmological. I will try to set down briefly and in turn the principal conclusions in each of these fields.

1. *Psychological.*—Sensations are the modes of intensive or potential energy into which the afferent currents of motion or kinetic energy are transformed at those points in the nervous system (presumably the synapses) in which they are re-directed into efferent currents of muscular and other responses. When and where the energy of the stimulus ceases to be externally observable as motion, there and then the new kind of energy, purely private and internally observable as sensation, comes into existence. What from the standpoint of the physicist is mere potentiality of future motion, is in and for itself the actuality of feeling and sensation. These intensive energy-forms fade out rapidly, though never completely, into their appropriate motor responses; but their traces in all their specificity are retained, accumulated, and superposed on one another after the fashion of the successive twists imposed upon a rope or spring. They constitute the memory-system of the individual, and like a faint but pervasive field of force they modify in accordance with their structure and pattern the responses to later stimuli. There thus grows up an organism within the organism, an enduring and ever-present register of the succession of past sensations, not externally observable yet causally effective upon the visible cerebral matrix. Unless we are to assume that a complex system of motions could pass at their moments of re-direction into

complete nothingness and emerge unscathed in magnitude and in form, we must believe that those energies in their latent or so-called potential phase possess, though invisible, all the richness and definiteness of structure that characterizes their visible antecedents and consequents. The character of such a field of potential energy as indirectly inferred from without possesses all the essential characters of the mind as directly experienced from within. Looked at from either standpoint, we find privacy, unity, "extension in time," or duration of the past in the present, and variety of content without divisibility or side-by-sideness. In any extensive aggregate of particles in motion, the unity is factitious and secondary, and the behaviour is the sum of behaviours of the separate elements. The forms and relations of the system are not, as such, primarily effective. But a field of force is like a mind in that the organic unity and pattern of the whole dominates the behaviour of the constituents, which are thus distinct phases rather than separate parts. And the forms and relations or *gestalten* within such an intensive system become what they never are in an extensive aggregate—namely, primary and effective determiners as such.

These, in briefest summary, are some of the reasons in support of the theory that the potentiality of external motion is the actuality of internal experience. Furthermore, such a theory has what seems to me a very important methodological advantage over other theories of the relation of mind to body. It enables us, in the first place, to accept as true the various points which psycho-physical dualists, from Descartes to Bergson, have urged so effectively as revealing the impossibility of the kind of structure which we know as mind, being a mere concomitant or inseparable aspect of the very different and essentially contrasting kind of structure which we know as brain. But in the second place the theory enables us to express these truths of dualism without departing from the physical categories which constitute the strength and fruitfulness of the mechanistic conception. To treat mind as a field of potential energy is to do justice both to its uniqueness of structure and to its homogeneity with the material world of which it is an integral part.

2. *Epistemological.*—Turning from the psycho-physical problem of the relation of mind to brain to that quite other though related problem of the relation of the individual as knower (whatever else he may be) to the object as known (whatever else it may be), we find an extraordinary situation—a situation in which an organism or system of events is in a curious and unique *rapport* with other events whose *loci* and dates are different from its own. Consciousness may, indeed, be defined as a situation in which certain events (the objects) enjoy a vicarious efficacy in spaces and times other than their own—namely, those of the brain that knows them. For when my conduct is controlled by my awareness of spatio-temporally distant objects, to that extent those objects are causally efficacious in positions other than their proper ones. And again, from the side of the knower or subject, the internal states by means of which he apprehends are controlled by their external and objective meanings rather than by their sensory content. The psycho-physical theory that the mind is a system of potential energies enables us to understand how and why its objects are other than itself. For potential energy has a double self-transcending reference. As the determiner of future motions it is an agent and faces future-ward, but as the "determinee" of past motions it faces past-ward, and is a patient. It is this retrospective reference of potentialities to their causes that constitutes the curious cognitive function. We live forward, but we experience backward. Facts are what we apprehend, and every fact is a *factum*, something done, a *fait accompli*. This explains the curious relativity of objects known to the subject that knows them, a relativity that is "selective" but never constitutive, like the relativity of historical events to the words that describe them. *Which things* we shall know at any moment depends on our internal states at that moment, but *the things* thus known are independent both in essence and existence of the states that reveal them. And as a potentiality viewed as a forward-facing tendency may be counteracted and fail to produce its characteristic effect, so may that same potentiality, in its backward-facing or cognitive reference, fail to reveal its true cause. This is the explanation of error. Our cognitive states

reveal their normal or most probable implicates, which may be, but need not be, identical with existing objects.

3. *Biological.*—The outstanding mystery of organic life is the peculiar capacity of a fertilized germ to embody in its own material structure—apart from the truth or falsity of the Lamarckian theory—the structures of its myriad of ancestors. These present embodiments of an enormous past certainly do not exist side by side or within one another, as the "Encasement" theory would have it, nor can they be accounted for in terms of the number of possible combinations and permutations of their atoms. These various possible arrangements would, of course, be more than sufficient numerically, but they would not persist in any definite order through the intercourse with the environment. Their definiteness of arrangement would be washed out through successive interactions. In order to account for the persistence of the heredity-structure through all the vicissitudes of ontogeny and later growth, it is necessary to allow to the germ tremendous causal prepotency over its environment. The latter is only a releasing and sustaining condition, and by no means an equal partner in the interactions. Now, if the ancestral past of a germ is present in it as a system of potential energies superposed to any degree upon one another in an intensive hierarchy, then we have an adequate system of causal determiners of the process that ensues, and the reason for its persistence with unaltered specificity is plain. Pre-formation becomes reconciled with epigenesis. For the constellation of atoms in the material structure of the chromosomes can be meagre and without resemblance to the structures that are to ensue (epigenesis), while at the same time the hierarchy of intensive energy forms may embody in their own invisible and temporally ordered structure an infinitely rich system of all, and more than all, of the forms of past ancestry and of possible future posterity. This is a sort of pre-formationism, but it is "energic" rather than materialistic.

4. *Cosmological.*—The Einstein Theory of Relativity might appear at first sight to have no relevant bearings upon my hypothesis as to the nature of mind and life, and yet it has seemed increasingly to be congruent with it. The Einstein-Minkowski

world is a four-dimensional continuum of space-time. As usually conceived, that world is in a queer sense static. The time aspect of it is like time that is past. The present flowing of time, what Whitehead calls the fact of *Passage*, is not provided for. It is a world whose objects, when temporally considered, are histories; but as in the world of Spinoza they are histories that *sub specie aeternitatis* have been always completed. Now, if we amend this world to provide for its life as well as its shadowgraph, we may fancy it as a space-time hyper-sphere, not static, but growing or expanding cumulatively, and (if the Special Theory of Relativity is true) non-Euclideanly—in a direction perpendicular to its "surface." The three-dimensional "surface" of this growing hyper-sphere is the spatial or material world. The electrons and protons may be thought of as the hills and hollows, or pimples and dimples, which are opposite and unequal fourth-dimensional displacements in the three-dimensional "surface" of our space. They would be produced by equal and opposite corkscrew "twist-thrusts." If the "surface" were *not* expanding, the equal and opposite "twist-thrusts" would give protuberances and depressions that also were respectively equal. But in an *expanding* spherical surface equal *twists* would be correlated with unequal *thrusts* or displacements in the direction of the perpendicular. If these displacements represent the mass of the hill or hollow and the twists represent the electric charge, then we could understand how the degree of the depression (protonic mass) could be greater (1,845 times greater) than the degree of elevation (electronic mass), though their degrees of twist or electric charge were equal.

If material particles can be thought of (following Clifford) as the permanent four-dimensional departures from the three-dimensional surface of the ether on which they float, then the associated vital and psychical systems of potential energy, registering the actual past and so foreshadowing the probable future of the bodies with which they are connected, can be conceived as the temporary and more tenuous four-dimensional extensions (or durations) that are the invisible appendages of their visible matrices. Thus I believe that the mind, as a system

of potential energies in the cerebrum, is a real soul, thick or deep in the direction of the past from which the world has moved. The world is a true "pleon," a self-increaser, and the vital and mental structures contained in it are moving all together with a cumulative growth-motion in a fourth-dimensional direction. That motion we perceive, not as such, but as the *passage of time*. The inner part of the world-hyper-sphere constitutes its definite and still enduring past, while the as yet unoccupied space outside, into which it will grow, constitutes its indefinite future, filled only with the possibilities which are the shadows thrown forward by what already is. The world-soul, like the souls of men, hangs down in time, extends into the past. Its material existence and ours at each present instant is but the three-dimensional cross-section, the fighting-front of a four-dimensional spiritual reality.

I have made a desperate attempt to express in a few paragraphs the broader implications or applications of my theory of the character of mind and organic life. My philosophic speculations have brought me to the goal of a cosmological spiritualism, but a spiritualism that in a sense can be expressed in physical categories. And so with equal propriety it may be termed a spiritualistic or animistic materialism. The hopes and fears of one's heart exert such hidden and potent influences on one's intellect that it is hard for anyone to be sure whether his conclusions in matters of life-and-death importance are intellectually honest. At times I feel a sort of shame and self-mistrust that I should have come out with a philosophy so optimistic. That the world is a spirit, and that we are; and that perhaps we share even the immortality of a Life that contains and sustains us is a creed almost too happy and too good to be true. And yet I do believe that if not true it is something very like the truth.

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EMPIRICAL IDEALISM

By DE WITT H. PARKER

Born 1885; Professor of Philosophy, University of Michigan.

EMPIRICAL IDEALISM

My interest in philosophy dates exactly from the moment when, in the little public library of Summit, N.J., a mere boy of eleven years, I chanced upon White's *History of the Warfare of Science with Theology* and read on through the afternoon until closing hour; then hastened home to announce to my astonished sisters that Adam and Eve never existed, that Noah never gathered the animals "two by two" into the Ark, that Jonah was never swallowed by a whale. Years of fervid quest followed, during which, without teachers and without fellow-inquirers, I tried to discover whether the 'faith of my fathers' was or was not true. Small wonder that, with a brain seething with such thoughts, I lost interest in the more usual pursuits of boyhood, so unexciting by comparison! I read all the books relating to the subject I could lay my hands on, making use later, on the family's removal to Boston, of the ample resources of the Public Library there; first, books of 'higher criticism,' beginning with Renan and Strauss; then books of popular philosophy, like those of Fiske, Haeckel, and Carus, dominated by the concept of evolution, and even weightier works, such as Martineau's *Seat of Authority in Religion* and Spencer's *First Principles*. Under the influence of all this reading I passed from orthodoxy to Unitarian 'theism' (fortified incidentally by Felix Adler's *Creed and Deed*, a book that I know has left a permanent impress on my mind); thence to a mystical pantheism and nature worship; and, finally, after reading Matthew Arnold's *God and the Bible*, Darwin's *Descent of Man*, and books of Spencerian and Comtean positivism, to entire rejection, as I thought, of all theological beliefs.

When I entered Harvard in 1902 I had, therefore, lived through six years of lonely and unguided reflection, with a purely negative result. Yet I came with a tremendous eagerness to discover, if possible, the real nature of things, and a profound conviction that philosophy, and philosophy alone, could inform me. My life's purpose was henceforth fixed. In my Freshman year I elected History of Philosophy, ancient philosophy being given by Santayana and modern philosophy by Professor R. B. Perry.

Few of my later experiences will stand comparison in vividness and freshness of joy with my first readings in genuine philosophy in connection with this course—the reading of Plato's *Republic*, Aristotle's *Ethics*, Descartes' *Meditations*, Spinoza's *Ethics*, Hume's *Treatise*, Berkeley's *Dialogues*. How trivial by contrast all my previous reading seemed, as the shadow to the substance! Later on I was to listen to Royce lecture on Kant and Symbolic Logic, Santayana on Plato, Palmer on Goodness, Muensterberg on Eternal Values, James on Tychism and Radical Empiricism. To me and to my fellow-students, philosophy, as represented by these men, whom we deemed immortal, was still in the making, and "to be alive was very heaven" in their company. Yet I was not able to count myself a disciple of any one of them. A regrettable shyness, and a too great reverence for my professors, prevented me from seeking them out and getting personally acquainted with them; and besides, there were always, in the case of each one of them, important matters of theory, with regard to which I could not follow them. To my thoroughly unpractical self, James's pragmatism was meaningless as philosophy; in his proofs for the existence of the Absolute, Royce seemed to be always 'working for an answer,' like the small boy who has peaked into the back of the exercise book and already knows the solution of the problem; Santayana's materialism could not stand in my mind against Berkeley and Hume; the new realism of Holt and Perry I thought incapable of accounting for subjectivity, for knowledge, error and illusion; Palmer's ethical pietism seemed inconsistent with the fact of evil, and Muensterberg's contrast between science and life too sharply drawn. Yet from each of my Harvard teachers I learned things invaluable for my philosophical development: from Royce my interest in Symbolic Logic; from James the standpoint of radical empiricism and a bias towards pluralism and indeterminism; from Santayana an awakening to the problems of value (I still think Santayana's whole metaphysics, with its artifices of matter and essence, however original and beautiful in expression, a sad mistake, while his interpretations of culture remain incomparable in our generation); from Perry and Holt a

discontent with traditional solutions. Aside from my debt to my teachers, I owed most, during my student days, to Berkeley and Hume; to Hegel and Nietzsche; to Bradley, Mach, and Avenarius, and outside of the field of philosophy, to my study of Greek and mathematics.

Since leaving Harvard I have taught at the University of Michigan for nearly twenty years, with the exception of two years spent at the University of California. During these years I have made a special study of aesthetics, both historical and theoretical, falling successively under the influence of Santayana, Lipps, and Croce, but eventually working my way to an independent standpoint, as represented in my books, *The Principles of Aesthetics*, 1920, and the *Analysis of Art*, 1926. Plato and Aristotle, whom I teach, have persistently occupied my thought; my knowledge of the German idealists and of Leibniz and Spinoza has been intermittently renewed and extended; Bergson and Peirce, both strangely neglected during my student days, have influenced me powerfully. Like most of my contemporaries, I fancy, I have been tantalized and stimulated by the writings of Russell, so fresh and mercurial; and through his work largely I have maintained my interest in symbolic logic, a subject which I teach occasionally to minute classes of advanced students. My book, *The Self and Nature*, 1917, represents the impact of all these influences for the first ten years of my professorial career. The book is merely an impressionistic sketch, full of inconsistencies and other shortcomings; but I still adhere to its essential positions. Very recently, as a result doubtless of ethical problems raised by the Great War, I have become interested in the problems connected with the general nature, classification, and criticism of Values. With reference to these problems I have derived the greatest help from Hegel, Nietzsche, Freud, and the Austrians, and more recently from the protagonists of the *Gestalt* concept. Throughout my career at Michigan I have profited exceedingly from the friendship and intellectual companionship of my colleagues, Professors Wenley, Lloyd, and Sellars. From Sellars I am sure I have borrowed some points in theory of knowledge, while dissenting vigorously from his disguised materialism.

With the above as an autobiographical introduction, I shall now attempt to give a sketch of my philosophical position, confining myself mainly to metaphysics.

For me the proper standpoint of philosophy is what James called 'radical empiricism,' which is, as I understand it, the demand that the philosopher shall use only concepts representing concrete experience. This point of view was already occupied by Hume when, for every idea, he sought the corresponding impression. Hence, I should say, Hume's method remains essentially sound, while his results are often defective owing to faulty analysis of experience. The key to the understanding of reality lies within experience, and to find the metaphysical meaning and validity of such concepts as cause, law, stuff, substance and the like, we must look to their experience-equivalents. Moreover, since experience is a part of the system of the universe, it is reasonable to believe that it provides us with a fair sample of the whole. I see no reason for believing that there is any other stuff or substance except experience; hence, to my thinking, materialism, naturalism—evolutionary or not—epiphenomenalism, and the like, are the *proles horrenda* of philosophic perversion. In philosophy we must start from ourselves, and I would quote Goethe's verses as applying not only to happiness but to truth:

> Willst du immer weiter schweifen
> Sieh, das Gute liegt so nah.

If it be objected that this is too introverted a standpoint, my reply is that following the other path has led to the contemporary impasse. In so far as the great systems of idealism built upon concrete experience rather than upon the abstract and problematic concepts of natural science, they were, I believe, on the right track; they were wrong, however, in neglecting such humble problems as the relation between mind and body; in accepting too uncritically the background of ideas supplied by Christianity, and in paying too little heed to science and its problems and major results. My own thinking is in line with the more empirical type of idealism represented by Berkeley and

by Schopenhauer in his saner moments, and among recent thinkers, by the Bergson of *Les Donnés Immédiates* and the little masterpiece on Relativity. But now for some results following this method.

The analysis of experience reveals two types of facts, percepts, and activities. By activities I mean such facts as desiring, judging, appreciating; to call them activities is already to characterize them in a fashion, and to distinguish them from percepts which are given to us as relatively passive. Emotions, pleasures and pains, and the like, have an equivocal status, partaking of the nature of both. The activities, in their order and connections, constitute the self. I distinguish the self from the mind, for by mind should be meant the whole complex of activities and associated percepts. It is clear that each self is associated with a group of percepts in a way not further describable, and not associated in the same way with the activities and percepts of another mind. So far as our knowledge goes, there are no percepts without activities, and no activities not associated with percepts.

Following the method of radical empiricism and granting the existence of minds other than our own, we can define the nature of physical things. Let us begin by inquiring into the nature of the body of one of our fellow-men. In the first place, his body consists of certain percepts of mine, of his own, and of other minds that may be acquainted with him. These percepts resemble each other, and are connected together in a certain order in time and in space. To the old question whether a thing exists when I do not perceive it, the answer is always possible that it does, so long as there are any percepts of the type in question in the mind of someone else. But we can go farther than this, and in so doing we reach an enlarged notion of the reality of the thing. For it is possible to show, by a process of reasoning easily divined, but into the detail of which I have no space to enter, that all the percepts in question proceed from a single centre. For example, many men in a concert-hall get percepts of the violinist drawing his bow; but all these percepts proceed from an activity of the violinist—his interest, drive, wish, or whatever you choose to

call it—which expresses itself in his playing. This activity is the real thing-in-itself, the true physical object, the focus of the thing, of which all our percepts may be called phenomena. (My dependence upon Schopenhauer, at this point, is obvious.) Of course, further knowledge of the body shows that most of its phenomena are not conditioned by the activities of the violinist; or, if so conditioned, are determined by other factors as well; so that, in the end, we come to see that the organism is a complicated system, of which the self is only a small part, co-governing only such phenomena as voluntary muscular action, and to a lesser degree, glandular and other 'autonomic' facts. What, then, is the reality corresponding to our percepts of the more purely somatic processes of the body? If we accept the principle which I am employing, that the self is a sample of nature, we shall be committed to believing that the other elements in the system of the organism are of the same character as the self, that they, too, are activities, associated as ours are, with percepts.

The inorganic world should be interpreted in the same way. For the organism is not essentially different from inorganic nature; from the point of view of the chemist, it is built of the same materials; metaphysically, also, it must be of the same kind. Every physical thing consists, in the last analysis, most immediately of percepts, which have no existence apart from minds; these I shall call the circumference of the object; and secondly of activities, which do exist independently of a perceiving mind; these I shall call the centre or focus of the object. The percept may be viewed, causally, as the reaction of one mind to the activities of another mind, and, epistemologically, as the symbol or awareness of the presence and efficacy of the other mind. Nature is a vast system of such centres of activity with their associated percepts. What in the contemporary philosophy of science are called events, are, in my view, happenings within such centres. The aim of science, as Russell puts it, is to give the chrono-geography of these events.

The activities are not only part of the stuff or material cause in the Aristotelian sense—the rest of the stuff being percepts—they are also substance, essence or 'continuant' (to borrow

W. E. Johnson's term), in the sense of that which remains identical despite change. There is nothing in the universe substantial except plan, purpose, wish, meaning. These facts are given to us as identical; indeed, the very import of the concept of identity can be shown to be dependent upon them. Sense data, on the other hand, come and go, are qualitatively alike, perhaps, but are never identical. My plans and interests, on the other hand, remain observably the same through the years. This sameness is, of course, not incompatible with difference; in fact, sameness, as Hegel insisted, is meaningless apart from difference; to affirm that "A is A" is to say no more than just "A." Essence is always immersed in change and growth. It has been objected to the type of metaphysics which I advocate that it provides no place for conservation, which is so important a fact in science; since mind, it is alleged, is by nature evanescent, new every day, following sleep, and perhaps every few moments, with each pulse-beat of attention. To this I would make reply that there are two important ways in which there is conservation in mind: first, in the identity of the activities, just referred to; and second, in memory and tradition, through which something out of the past is carried on into the present. And when one inquires narrowly into just what science teaches concerning conservation, one finds that it knows of no conservation except of types of behaviour, of laws. But laws are precisely the plans, the habits, the purposes, the memories of nature; or, more exactly, the ways in which these things manifest their invariances in our percepts.

The chief difficulty, however, in the way of accepting substance as pertaining to mind comes from false views of time. And since, in my opinion, almost everything of importance in metaphysics depends upon getting this matter straight, I shall give to a consideration of the category of time what might otherwise be a disproportionate number of pages of this essay. But even so, I shall be able to report only those radically empirical facts which seem to me of basic consequence for metaphysics.

Decisive for any conception of time is the definition of the 'present.' Now by the 'present' can be meant nothing short of the whole of reality of which *this*, whatever this is which I

perceive, is a part. The present and reality are co-extensive, not to be sure in connotation, but in denotation. For reality can be defined only through relation to the perceived, as the conceived system to which the perceived belongs; it is the whole of which 'this' is a part. But the 'this' is not only the determining basis for the construction of reality, but also for the construction of the present; for the present is precisely the given, or the whole of which the given is a part. Hence the extension of the two concepts, 'present' and 'reality,' coincide. This might seem to reduce reality to a bare point, but only because of mistaken views of past and future, as we shall see. However, since percepts are shifting, new ones emerging and old ones disappearing, the present, and by the same token reality, as the whole of which this percept is a part, is a variable. Yet the shift is never total; for if my assumptions regarding substance are well-grounded, some elements or parts of reality are always conserved. If this were not so, then, since the present is the whole of reality, past and future would coincide with non-existence. But since it is so, and since, as I think may be taken for granted without argument, time by itself has no reality, but only its 'filling' is real, it follows that at least part of the past exists as part of the present. It so exists in two ways: First, all the identical elements of reality, since they did exist as well as now exist, *are themselves the past*; in them past and present overlap. Second, the past exists as memory and history. The shift within the mind is not merely a shift to new contents, but to the *preservation* of the old in memory and conceptual reconstruction.

Consider the matter with reference to yourself. What is your past? Surely your enduring interests are your past—this interest in philosophy, that affection, that belief, that habit—without all of which your past would never have been what it was. These facts are of your past, part and parcel of it, quite as much as they are of your present. When you look back over your past, you find them there, just as you now find them here. The only reason one might have for denying their pastness would be a false use of 'past' as a contrast term to 'present'; but there is no total difference between past and present; for precisely over the area

of our persisting interests, they coincide. Our memories and records of the past are also bits of the past. As intuitive, memory contains at least a part of what it knows; and if record is true, its logical form or structure must be identical with the form of the things it records. But so far as memory and record are parts of the living mind, they not only contain a portion of the past, but are themselves a portion of the present. Whether some part of every past fact is conserved in the present through memory or record, or whether, in Plato's language, existence has a leak in it and there are elements which disappear entirely, is a question which, in my opinion, cannot be answered with certainty. So far as our own experience takes us, we know neither the riches nor the poverty of memory: we remember much more than we think we do, and, on the other hand, we have reason to believe that there were many things which we have forgotten, and of which there is no record. Yet that there exists no record of any fact anywhere in the universe cannot, of course, be known. But however this matter be settled, it remains true that not all of the past is conserved; for in the transition from primary experience to memory and record, something is lost. We have a direct experience of the breaking up, loss, and destruction of things. The vase that I hold in my hand will not be wholly conserved in my recollection of it if I drop and break it; nor will the deed that I do be wholly preserved, but only its pale echo of memory in my mind.

The theory of the status of the future can readily be constructed from the theory regarding the past. The future is real, as the past is, so far as it is a part of the present. It is real as the permanent interests, plans, and affections which, existing now, will exist also then, are real. As expectation and prophecy, it is also real. It has no more—and also no less—reality than this. And it, too, like the present, is a shifting reality, only the shift is in the opposite direction. Instead of beginning as primary experience and then shifting to idea, in which it is then partly conserved, it begins on the plane of idea and passes to the plane of primary experience; and again, instead of there being a loss as the result of the shift, there is a gain. The deed that I am about

to do does not exist in some region remote from the present called the future; it exists not at all except as my present purpose and expectation, which are, however, also future. Hence through the shift towards the future, when the plan is fulfilled in the deed, there is compensation for what is lost through the shift to the past; and, as a result of both processes, there is a growing complexity in the present, which is reality; since something of the new that comes in at the future end of the process is not lost, but is conserved as memory or history, at the past end.

If this view is correct, it follows that past, present, and future are not exclusive; that to exist, which is always to exist in the present, is also to exist in the past and the present. There are no momentary existences. There are certainly no momentary selves. The self is a system of habits and memories; but habits and memories are 'the past over again,' and when I act in accordance with some habit or recollect some former deed, I am relieving a fragment of my former self. Yet, in thus reaching back into the past, I do not cease to live in the present; for my action and my memory are occurring *now*. Moreover, I never act without a plan, clear or vague; and when, reckoning with all relevant conditions, I 'dream on things to come,' my dream is more than mere prophecy; it is 'anticipation,' a taking before of the experience to which I am moving: hence, while my dream lasts, I am actually in the future. Nevertheless, I do not thereby cease to be in the present, for the dream is here and now. I am always at once past, present, and future, a threefold reality, but my past and my future lie within the present. Or consider a series of geological strata. The rock formations are dated in the past, yet they all lie here together in the present. And if I can predict what will overlie them as a new stratum, there must be something real of the future that even now makes my prediction true; otherwise, my judgment would be mere hypothesis, not truth. In general, whenever prediction is possible, there must be something of the future in the present which *makes* my predictions true: in the present reality of the comet, something which makes me certain of its return; in the earth, something which makes me certain of its continued revolution; nature, like man, must have its plans

and its habits. The present is, therefore, no knife-edge, nor even of the limited breadth of a saddle-back, but as broad as history and prophecy.

The considerations adduced are fatal to the view of time as a series of instants comparable to the series of points on a line, and might serve to reinforce Bergson's critique. And it does not help matters at all to multiply the number of points to infinity, so long as the points and correlative instants are taken to be exclusive and repellent of their neighbours. Yet because time is not a series like that of the points on a line, it does not follow that it is no series at all, and that there is not a very definite order among its parts. In my book, *The Self and Nature*, I suggested that time might better be viewed as a series of overlapping areas, of which a series of concentric circles is the simplest illustration. Adopting this analogy for the moment, it is clear that the area of the outermost circle would represent *the* present, and the area of each inner circle would represent the parts of further presents which have been conserved; and since some part of each present always is conserved, there would be as many circles as there are 'moments' of past time, each moment containing within itself parts of all preceding moments. There would be no first moment (circle), and there would be a part of the total area contained in all circles or moments, namely the point that would be the limit of the series of diminishing circles. This point would represent the eternal part of reality. This analogy, like all static images of dynamic reality, is, of course, defective in that it does not provide for new presents, for growth. To remedy this defect, it is necessary to conceive of new circles being continually added on. However, this defect does not touch the main points of the discussion—the serial character of time and the non-exclusiveness of moments, for the laying down of new circles would occur in ordinal fashion, and the later circles would include the earlier. There is, nevertheless, one serious defect in the analogy, the failure to represent the inclusion of the future in the present; but, with some ingenuity, this could be remedied. The important fact of 'leakage' is represented by the diminishing area of the inner circles, while the growing area of the outer

circles represents the increasing complexity of the present as compared with the past. Moreover, if the theory of relativity is true—I do not think that philosophy can *yet* assume that it is true—there would have to be as many circles as there are centres of experience, overlapping, to be sure, but never quite identical.

Space, no more than time, is a substance; but, as Leibniz asserted, a relation between substances. Moreover, as Guyau already knew, and as we are certain from the work of Minkowski and Einstein, space cannot be understood apart from time. Naturally, I can merely sketch what I believe to be the true picture of space. For example, the location of a thing is clearly ambiguous, if the entire thing, circumference as well as centre, is taken into account; for each percept of the thing is in a different place. For this reason, it is best to restrict the place of the thing to the place of its focus. Thus restricted, to choose the most interesting case, the place of the human mind turns out to be the same as the place of the brain, as Sellars has maintained. But, of course, place is nothing in itself, and one place can be defined only in relation to other places. A place is an office, and just as men may exchange their offices, as when two professors exchange their chairs for a year, so they may exchange their places; that is, the relations which A had are now had by B, and vice versa. Not all relations are relevant, but only the relation which may be called by a variety of names—influence, determination, communication. To be in the same space with another thing is to be able to influence, determine, communicate with that thing. In terms of this relation we can define what is meant by one thing being between two other things: A is between B and C, when, in terms of a certain type of process, if B is to influence C, it must first influence A; and conversely, if C is to influence A, it must also influence B. Three things have this order 'on the same straight line,' when a light signal, in order to reach C from B, must first pass through A. Again, one thing is in the neighbourhood of another, or is close to another, when, in order to communicate with that other, it can do so without first communicating with relatively many other substances. The dependence of space upon time is shown by the necessity for using the concept

of temporal sequence in order to make these definitions. Distance can also be defined through the concept of communication in union with the concept of sequence. For one thing is nearer than another to a third, if in terms of a given process you can communicate with the one sooner than you can communicate with the other, starting from the third. Since, finally, metrical geometric relations can be reduced to ordinal relations, all spatial relations can be reduced to temporal relations, with the use of the concept of communication. Distance, 'spreadoutness,' voluminousness, etc., are secondary, not primary qualities of the world. Owing, however, to the tri-dimensionality of space, the carrying out of these definitions is extremely complicated; and if the theory of relativity is true, order itself, and therefore distance and location, are not determinate in certain cases.

Are space and time continuous or discontinuous, or is there some meaning in which they are both? Contemporary physics seems to answer, Both; and with regard to the special problems of science, metaphysics, standing in the position of humble learner, has nothing to say of her own. Yet in view of the fluctuating character of opinion in physics to-day, it is hazardous to accept any result as final; and, on the other hand, if the method of radical empiricism is acknowledged to be true, metaphysics has, I believe, something to contribute to the general problem. For if we are in earnest in taking the mind as the 'type-phenomenon,' we shall be inclined to accept as generally valid, the sort of continuity and discontinuity exemplified there. And what do we find when we examine experience? We find a basic continuity in the two fundamental dimensions of experience, its flow and its extension (the one corresponding to time and the other to space), and upon this continuity there is superposed discontinuity. Thus the 'advance' into the future of my experience is sensibly continuous, yet is broken by the discontinuity of the strokes of the campus clock as I hear them during the day; thus my visual field is sensibly continuous in the sense that there are no parts of it empty of colour, yet this continuity is overlaid with the discontinuities of the differences in colour between one patch and another.

The empirical continuity is, however, far from being continuity in the Cantorean sense, but rather in the sense of Aristotle, of unbrokenness and wholeness. In the empirical continuum there are no Dedikindean cuts, but party walls. In history, for example, there are no division lines between one age and another—say between the Middle Ages and the Renaissance; in the growth of the man, there is no point of time before which he is a child and after which he is a youth. A little way before, we can say, now he is a child, and a little way after, now he is an adolescent; but there is a stretch of time during which it is impossible to distinguish child from youth. So in space; some distance this side, I can say, now I am in this object; and some distance that side, now I am in that object, but there will be a stretch of space within which the objects are one. Empirically, things fuse at the edges, and at the edges the principle of excluded middle does not apply. It is a mere dogma to insist that it must apply everywhere; whatever validity the principles of logic have is empirically grounded. Nevertheless, I would not go the whole way with Bergson; for while insisting on the wholeness and unbrokenness of the empirical continuum, I believe that distinctions exist within it, except at the edges, where one thing shades off into another. The principle of excluded middle has a limited, and only a limited, validity. I am therefore not surprised to learn that contemporary physical theory does not seek to define the position of a particle at an instant, but merely a certain range within which it may be known to exist. This is not, I should think, a purely 'epistemic' difficulty (to borrow the convenient term of W. E. Johnson), but a metaphysical state of affairs. Following the guidance of the radically empirical facts, we shall expect the universe to contain an enormous number of centres of experience, of varying degrees of complexity, communicating with each other, some more directly, some more indirectly, through few or many intermediaries; and finally constituting as a whole a continuous unbroken substance, for the reason that there is direct contact between foci nearest to each other, in a next to next fashion. Thus, while there is discontinuity and only indirect communication between one man and another, there is

direct and continuous communication between a man's mind and his body; or what is the same thing, between the nervous system and the somatic processes of the body: no one knows where the mind begins and the body ends. Certainly in the sensory processes, at the point where stimulus and reaction meet, and perhaps in many an obscure impulse, the mind of the nervous system and the 'mind' of the 'soma' *overlap*.

Once the non-empirical and approximate character of the Cantorean continuum is recognized, there remains no reason for believing either that there are an infinite number of foci or that each is infinitely complex. Empirically, we have what may be called an Aristotelian continuum, with a finite number of individuals enmeshed within it, both in extension and in flow; and while it is true that the success of physics in applying the differential calculus to nature seems to be a good argument for belief in nature's infinite complexity, two considerations on the other side are relevant. First, the application of the calculus is never more than approximate; and, second, recent researches into the foundations of the theory of functions, notably by such men as Brouwer and Weyl, have at least cast doubt upon the soundness of the structure completed by Cantor. It is my own opinion that the familiar paradoxes of the infinite have never been satisfactorily explained away, and that, viewed as an existence, an infinite collection is a self-contradictory notion. (I once ventured this opinion to Mr. Russell, who told me that if I had studied the matter for thirty years as he had, I would reach a different conclusion; I have to confess that I have studied it for only twenty years, and that not continuously.) It is again my personal opinion, which, however, I now hold with less diffidence than a decade ago, that the whole notion of existence should be abandoned in the philosophy of the infinite, and rules of construction substituted. Thus, instead of postulating in a dense point set that there exists a point between any two points, it should be postulated that I may construct one between any two whenever I want to; and, of course, I shall never get more than a finite number. In Aristotelian phraseology, the infinite is at best potential, never actual. This is certainly true of time; obviously

of the future, the stages of which are not, as such, actual; but it is no less true of the past, for, as we have seen, the past exists either as persisting substance, within which no stages can be distinguished, since it is identical both in the present and in the past, or as memory and record, which never reveal more than a finite number of events.

These considerations relative to continuity and discontinuity are incompatible with an atomistic interpretation of mind and nature. The fact that, judging from history, atomism seems to be congenial to science, cannot weigh against its falsity from a radically empirical point of view. And to-day the inadequacy of atomism is receiving wide recognition; in psychology, notably by the members of the *Gestalt* school, and in the philosophy of science, by Whitehead, who recognizes that point, instant, and even event, when conceived atomistically, are constructions, not facts. Whole and part, not element and complex, are the metaphysically valid categories. Atomism has, to be sure, a last refuge to-day in the 'logical atomism' of Russell and Wittgenstein; but, once more, the *facts* require a different interpretation. There is no living philosopher who is not in debt to these thinkers —none more than I am—nor do I suppose that one can refute this doctrine in a paragraph; but, to my thinking, the unity or wholeness of the proposition is falsified by atomism; the assumed 'simples' are constructions, not facts; and a logic that has no room for general facts as such and denies the logical connection between present and future is clearly inadequate. But to return to the exposition of my philosophical *credo*.

Every centre of experience is in communication, directly or indirectly, with every other. (If the theory of relativity is true, there are exceptions to this, when the separation between centres is space-like.) This implies mutual determination, but allows for the relative isolation of systems. Moreover, every event that occurs is a response, determined partly from within its own centre, and partly by its 'neighbourhood.' There is no absolute spontaneity; for without the relations between one centre and another, nothing would happen; yet there is freedom in the sense that every event is determined from within its own relatively

isolated home. Every fact is a co-operative deed. We think of a painting as the work of the artist, but his mind would be ineffective without his hand, his paint, and his canvas; these must lend themselves to his effort, and the product is their joint act. Every event is, therefore, multiply determined and richer in its significance than immediately appears. In the end, the entire universe is implicated; yet, for all this, there is freedom; for if the world has made me what I am, I in turn have made the world.

One reason for the denial of even so limited a spontaneity as this, is a false view of time. For if, as according to old views of time, the past were discontinuous with the present, and the present were its mere effect, there could obviously be no self-determination anywhere in the universe. But if, as I would maintain, the past exists in the present, its control over the present is the present's own control of itself. We cannot, for example, shift the blame for our conduct upon our hereditary past; for our heredity exists and operates within ourselves; hence in blaming it we blame ourselves. If we say, 'The past has made me what I am,' the answer is, 'You are that past that made you.'

Any statement of a philosophical *credo* to-day must include some stand with reference to the subject of evolution, especially as interpreted in the sense of 'emergence,' creative evolution, discontinuity of levels. And here my stand is far from the contemporary orthodoxy. In the first place, I am unable, with Bergson and Alexander, to regard evolution as a category of the universe. Evolution, I believe, is an affair of the part, not of the whole of reality. Individual systems rise, flourish and decay, but the universe 'has no seasons.' Moreover, it is my conviction that what we call the inorganic physical world is a higher system than either the vital or the human. This is, I admit, a matter about which it is difficult to offer demonstrative arguments; but such reasons as I have are the following: First, a negative argument. The superior complexity of biological facts from a chemical point of view is not an argument against my belief, since if you take the larger physical systems as wholes, like the solar system,

for example, with all the phenomena they include, they are undoubtedly more complex than the organism. The philosophy of evolution has made the mistake of comparing the atom with the cell; instead of comparing the cell with, for example, the sun. This procedure is as false as it would be to judge the capacity of the organism as a whole with the capacity of the cell. Without doubt the atom is lowlier than the cell, but atoms are members of vast physical systems, possessed of their own individuality and way of existence, and these systems are incomparably higher in the scale than a man. Second, the more recent philosophy of physics tends to break down the sharpness of the distinction between the physical and the biological, in extending the concept of organism to the atom and the electron, and in recognizing a realm of physical chemistry. Last, physical systems are more permanent and stable than vital organisms, and with me, at any rate, this is an argument for their superiority. The contemporary mind does not feel the force of this consideration because of its romantic predilection for the transient and wayward—in short, for the pathetic. The Greek worship of the stars and Plotinus's notion of emanation represent, I believe, a truer conception of man's place in the universe than contemporary naturalism, which places man at the pinnacle of reality.

I find, however, a single valuable idea in the contemporary concept of emergence, namely a recognition of a strain of irrationality in existence. I have already insisted on this from other points of view. Here the emphasis is on the irrational element in causation. We are told that at certain 'critical' points in the world process, namely in the transition from physical to chemical action, from chemical to vital, from vital to mental, new types of behaviour and new qualities emerge, which, while determined by the earlier phases of existence, in the sense of growing out of them and being impossible without them, are nevertheless unpredictable from the earlier and irreducible to the system of the earlier phases. This concept of emergence is, by the way, not new; for one finds it in Schopenhauer long before Lloyd Morgan, Boutroux, Alexander, or Sellars. My chief point of criticism, and the only one I shall make here, is that the restriction of this

irrational aspect of causality to a few spots is unwarranted. Our greatest American philosopher, Charles Peirce, had the truer vision in recognizing the presence of irrationality in all causality; and in what I am about to write I am following the spirit, if not the letter, of his thought. What I have in mind is this: law, and hence predictability, are secondary, not primary. It is true that, as we have seen, every event is determined as growing out of some system; but how it shall grow when the system contains novel elements can never be known beforehand; and there always 'emerges,' therefore, something unknown to the world hitherto. It is only after such an event has once happened that we can predict that, under the same circumstances, it will happen again; for by reason of its very happening, a habit or tendency to happen thus again has been established. Every new habit grows out of an old one, but when the old habit functions under novel conditions, its new development is never subject to exact formulation. Moreover, no situation in the world is ever quite new or quite old; hence everything that happens is at once subject to law and also beyond law. Law defines only the limits within which an event will take place, and these limits are precisely fixed; but within their bounds there is free play.

In contrast to all forms of materialism and naturalism, descended from the ancient line of Leucippus, Democritus, Epicurus, and Lucretius, which hold that value is a mere accident, incident, or epiphenomenon in the world, confined to certain so-called 'high level' regions, and that, therefore, there might well have been a world without value, I would maintain that value and existence are always correlative. This was the supreme insight of the counter-tradition of Pythagoras, Socrates, Plato, and Aristotle. There are certain facts within experience which are, I should say, obviously impossible apart from value: the song of the *prima donna*, the deed of love, the wine shared with friends. To suppose, as materialism does, that these things could be without their value is plain topsy-turveydom in philosophy. And such facts reveal clearly the nature of all value, as satisfaction of wish, or anticipation or memory of satisfaction of wish, usually all three together, since a wish fulfils itself in stages,

looking before and after. Yet experience contains other things that are not so obviously values: the green colour and smell of grass, the pattern of a crystal, the shape of a cloud. Wherever in the mind the activities function and give form to percepts, there is value undeniable; but in the case of other percepts, where our experience is determined, not so much from within as from without, there is no obvious value. Yet even such facts, I should claim, are correlative with value; and I take my stand on the type-phenomenon, which is for me the key to the interpretation of the universe. For consider the song that I hear; this is a percept that no wish of mine has determined; yet some wish has determined it, for without some stirring in the breast of the singer, not only not she, but also not I, would hear it. Every percept is, similarly, determination from without, and also communication of value. Even the shape of the cloud, the pattern of the crystal, the smell and scent of grass, are the expression of some wish, somewhere in the world. I admit that I have no sympathetic understanding of these values; yet—to use the example of James—neither has the cat any understanding of the sonata that wakes her slumber. And while the value of some percepts is not a value for me, it is a value for me that I have all the percepts that I do have, because the whole structure of my own values is made secure only by working in cooperation with the external forces that control my percepts, and of which my percepts are a sign.

It has been the assumption of certain forms of religious sentiment that we are able to understand the values expressed in what we call the forces of nature, and that these forces are biased in our favour. But this is, I believe, a great mistake. There is no reason to suppose that man plays more than an insignificant part in the cosmic drama. The more mystical types of religion have recognized this in conceiving the glory of God, rather than the welfare of man, as the highest good. The passion of love, which, like religion, has often claimed a supermoral justification, is also a witness to this in its high contempt for prudential and conventional values, as if it knew itself to be serving larger interests that work themselves out in the biological, as distinct from the

human and social facts of the organism. However this be, it is certain that no easy optimism regarding man's destiny follows from the recognition of the union of value and existence. For the values of one centre of experience are too often bought at the cost of the values of other centres. The universe is the theatre for a mighty conflict of wills, and without sacrifice there can be no good anywhere. There is, nearest to us, the conflict of wishes within each self; there is man's conflict with his fellows; the disharmony, as exemplified by death, between himself and the purely biologic facts of his organism; and finally, the conflict between the human mind and its inorganic 'environment.' This last—the inorganic world—is the final arbiter of our fate, and to its will all other wills must bow. Nevertheless, it is possible to exaggerate these conflicts, forgetting the inner peace of the good man and the equilibrium of wishes attained in the imagination through art; forgetting mutual aid among men and the fact that it is nature herself that, having permitted the new manner of existence we call life, and later the human mind, still sustains us. Our adaptation to the environment is also its adaptation to us. Nature is ever the Great Mother. Yet this we know, that whatever harmony is attained either by man or by nature is no 'easy beauty,' but a beauty founded upon conflict, the 'difficult' beauty of tragedy.

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REALISM IN RETROSPECT

By RALPH BARTON PERRY

Born 1876; Professor of Philosophy, Harvard University, Cambridge, Mass.

REALISM IN RETROSPECT

I. The Campaign Against Idealism

I UNDERSTAND that the purpose of the present book is to deliver its authors from the bonds of reticence, or from that canon of literary taste which limits the use of the first person. I therefore begin with the pronoun "I," and shall use it with reckless frequency. I shall also speak out the faith that is in me, allowing my beliefs to override my critical conscience. To begin with, let me confess that when, for the purpose of recovering the past, I re-read my earliest writings, they impress me as extremely convincing, affording an unexpected confirmation of my present philosophical bias. Myself of twenty-five years ago committed blunders, no doubt, but his faults were the faults of youth and inexperience. His heart was in the right place.

Such philosophical nourishment as I received in early youth was derived from Emerson and Carlyle. From them I caught no hint of transcendental metaphysics, but only a desire to be heroic. This influence, together with an intense adolescent religious experience, brought me to the threshold of manhood with a vague eagerness "to do good," or to contribute something to the triumph of that cause of righteousness which I identified with Christianity. My pre-natal philosophical experience was obtained at Princeton, where an emeritus McCosh still walked the campus, and where "Jeremy" Ormond, ponderous, high-minded, and unintelligible, accustomed the ear and the pen to a polysyllabic vocabulary. Migrating from Princeton to Harvard in the middle 'nineties was for me a perilous spiritual adventure, an abrupt transition from faith to criticism. Here, for the first time, something happened to my *mind*, and the vocation of the ministry was gradually transformed, without reaction or bitterness, into that of the teacher and scholar. Creeds and dogmas having become impossible, I thought that I had found a way in which I might think freely and still "do good." It is that naïve hope that has sustained me ever since.

At Harvard in the late 'nineties it was, for most of us, a choice

between James and Royce. Palmer taught us ethics, and by his example taught us how to teach. Santayana was historical and critical, Münsterberg schematic, and Everett learned. These were important elements in the configuration, and they generated both heat and light. But as regards fundamentals, whether of doctrine, method, or temper of mind, there was the way of Royce and the way of James. Royce was the battleship, heavily armoured, both for defence and offence. James combined the attributes of the light cruiser, the submarine, and the bombing aeroplane. It was natural to suppose that Royce was impregnable and irresistible. To surrender to him was as easy and as unexciting as to be a fundamentalist in Arkansas. James provided the rallying-point for those in whom the youthful spirit of revolt was stronger than tradition and prestige. Royce was the latest and nearest of a mighty race. His philosophy was powerfully reinforced by the texts of Bradley and Green, and by the great cult of Kant. His was the party of law and order, of piety and decency. This was not Royce's fault, nor did it at all adequately express his personal traits; but he suffered, none the less, from the taint of established things. So when James, overcoming his earlier fears, had the audacity to make jokes about the Absolute, there were Athenian youths who laughed with him. Many of us have, since that time, become sadder, and, I hope, wiser. But the spell of absolute idealism was irreparably broken. There arose a generation of younger philosophers who were, as Creighton expressed it (speaking more in sorrow than in anger), "flippant, like James."

James's right to flippancy was well earned. In the year 1896–97 he conducted a group of us through the text of Kant, and when, after months of intense effort and profound discouragement, he told me that I might sometimes attribute my difficulty to the author's obscurity or pedantry, rather than to my own feebleness, he conferred on me the title to a canine bark of my own even when Sir Oracle had spoken. James's example did not suggest an ignorance of philosophical literature, but it did beget in all of his students the habit of checking every text, no matter how authoritative, by their own experience. The question "What does the text say?" was incidental to the ulterior questions,

"What does the author mean?" and "Is it so?" I was not surprised, therefore, that upon receiving a copy of my maiden effort on "The Abstract Freedom of Kant,"[1] James should have written me expressing the hope that I might now feel justified in casting off the Kantian "ball and chain" which had for many years hampered the movements of philosophy.

To specify my indebtedness to James is as impossible as it would be to enumerate the traits which I have inherited from my parents. In view of contemporary developments in philosophy, I should like, however, to record the most vivid of the doctrinal impressions which he left upon me in the early days. I can remember even the stage-setting—the interior of the room in Sever Hall, the desk with which the lecturer took so many liberties, and the gestures with which James animatedly conveyed to us the intuition of common-sense realism. From that day I confess that I have never wavered in the belief that our perceptual experience disclosed a common world, inhabited by our perceiving bodies and our neighbours, and qualified by the evidence of our senses.[2]

It was the controversial atmosphere of my early studies that led to my preoccupation with the shortcomings of idealism, and to my sustained interest in the classification of contemporary philosophical tendencies.[3] European and American Philosophy, as I saw it at the close of the nineteenth century, was a dispute between the extravagant claims of the party of science (naturalism) and the equally extravagant claims of that post-Kantian idealistic philosophy, which, invigorated by its transplantation from Germany to a foreign soil, had become the bulwark of English-speaking Protestant piety.

It is unprofitable to quarrel over the diverse meanings of the term "idealism." That idealism which I went out to slay was

[1] *Philosophical Review*, 1900.

[2] The substance of this teaching was afterwards embodied in the article entitled "How Two Minds Can Know One Thing," which James published in the *Journal of Philosophy, Psychology, and Scientific Methods*, 1905.

[3] "Professor Royce's Refutation of Realism and Pluralism," *Monist*, 1902; *The Approach to Philosophy*, 1905; *Present Philosophical Tendencies*, 1912; *Present Conflict of Ideals*, 1918; *Philosophy of the Recent Past*, 1926.

born of the marriage of subjectivism and universalism. Its proof seemed to me then, as it seems to me still, to consist in an unseaworthy subjectivism rescued from the shipwreck of solipsism by the miraculous intervention of absolutism. The first premise is subjectivism, the doctrine, namely, that to be = to be perceived or thought. The second premise is universalism, the doctrine, namely, that being cannot be a product of human perception or thought, because man is a part of nature, and because the truth is a standard by which human perception and thought are themselves to be judged and corrected. The conclusion is absolute idealism, the doctrine, namely, that to be = to be perceived or thought (or willed, or felt, or otherwise manifested) by a transfinite, all-containing and infallible mind, commonly called "*the* Absolute."

The argument is dialectical and a priori, and its force depends on the truth of both premises. The critics of this reigning doctrine are readily divisible into two groups: those commonly called "realists," who have attacked the first premise; and those variously called "pragmatists," "instrumentalists," and "humanists," who have attacked the second premise. The former group being united by their rejection of subjectivism, are divided among themselves on the question of universalism; the latter, being united by their rejection of universalism, are divided on the issue of subjectivism. Both groups reject absolute idealism, but while one rejects this doctrine on the score of its idealism, the other rejects it on the score of its absolutism.

For the realist, then, the Absolute, construed as an individual mind or spirit, in which the imperfections of humanity are overcome and its prerogatives maximated—construed, in other words, as a being qualified to serve at one and the same time as the metaphysical reality, the moral standard and the object of worship—is the offspring of subjectivism. Such a being is not merely absolute: it is mind conceived as absolute. "I perceive," or "I judge," or "I will," or some similar act of conscious mind, is first supposed to be the inescapable form of reality; and since to identify this "I" with you or me or any or all finite creatures is palpably absurd, it is then inferred that there must be an "I"

which is no creature at all, but the Creator. And, as Bradley has put it, what must be, is. Hence in so far as the realist refutes subjectivism he at the same time destroys the meaning and the ground of the Absolute in this idealistic sense.

An idealist of the post-Kantian school resents being called a "subjectivist," but this is because he takes the term to imply that the "subject" in question is the natural or psychological subject. If "subjectivism" be used to mean that all being is the dependent creation of *some* subject, or self, or mind, whether finite or absolute, then, I think, the term can be applied to the idealist without offence. In accordance with this usage absolute idealism is that species of subjectivism in which the unconditioned and all-conditioning subject has, over and above such properties as make it a subject, those other properties of infinity, perfection, and systematic unity, which the term "Absolute" is intended to convey. With this understanding I shall hereinafter use the terms "subjectivism" and "idealism" interchangeably.

The wide prevalence of subjectivism has always seemed to me to be due, in the first place, to excessive insistence on a relation which the reflective habits of the philosopher dispose him to magnify. Subjectivism exploits the relation, namely, which the world indubitably has to the human subject whenever he perceives it, or thinks about it, or otherwise concerns himself with it. He exploits this him-ward aspect of things *metaphysically*—that is, he construes it as fundamental, or takes it as affording the deepest insight. The realist, on the other hand, calls attention to the fact that this emphasis, natural as it is, may be misleading. Thus when Pistol says, "Why, then the world's mine oyster," we recognize that he is taking liberties with the world. It is true that the world is, among other things, Pistol's oyster, and Pistol is excusable for having mentioned the fact. But if, as a philosopher, one were interested in making the most significant possible statement about the world, it would scarcely be pertinent to remark that the world is that which is opened by Pistol's sword. This is not one of those central and pregnant characteristics of the world of which the metaphysician is in search. In the course of its career the world does meet Pistol, but this conjunction does

not determine its orbit or destiny, nor does the bivalvular aspect which it presents to Pistol's sword afford the best clue to its essential structure.

In a sense that is at least superficially similar to Pistol's oyster, nature is Berkeley's percept and Kant's thought, or the idea of any philosopher who applies his mind to it. And it is not strange that sooner or later some philosopher should have taken this fact as the key to metaphysics. But the realist is one who is disposed, until more decisive evidence is advanced, to construe this indubitable relationship of the world to the mind that deals with it, as an accidental or subordinate aspect of the world. He refuses to assume [1] that knowing the world implies proprietorship. It is still open to him to suppose, with common sense, that the world *lends* itself to being known without surrendering itself wholly to that use. Such a view has its support in experiences that are no less authentic than Pistol's sense of ownership. If the idealist is justified in saying with Margaret Fuller, "I accept the universe," the realist is equally justified in remarking with Carlyle, "By gad, she'd better."

The question of the place of knowing mind in the universe, whether central or peripheral, is complicated by what I have called the "ego-centric predicament."[2] This was a successful bit of phrase-making, if one is to judge by the frequency with which it has been misunderstood. My purpose in introducing the phrase was to call attention to the fact that idealists have used as an argument what is, in fact, only a difficulty. The difficulty or predicament consists in the fact that the extent to which knowledge conditions any situation in which it is present cannot be discovered by the simple and conclusive method of direct elimination. I cannot see what things look like when my eyes are shut, or judge the effect of extinguishing my thought. If I cognize *a* in any way, shape, or manner, I am not cognizing *a* in the absence of that way, shape, or manner of cognition. This is, of course, a

[1] Arbitrarily to assign the leading rôle to a predicate merely because it happens to come first in the order of discovery or of discourse, has been called the "Fallacy of Initial Predication" (*The New Realism*, 1912, p. 15).

[2] "The Ego-Centric Predicament," *Journal of Philosophy, Psychology, and Scientific Method*, 1910.

truism, and in itself of no significance whatever. It does, however, bring to light the fact that the question which subjectivism raises is unique. In order that the question shall be *answered* at all, it is necessary to introduce the very factor, namely, the answering mind, which in examining this question it would be convenient to exclude. It follows that either the question must remain unanswered or that it must be attacked in some more indirect and perhaps less conclusive manner. If, for example, one can find out what the cognizing mind is and what it does, one can then discount its presence, or learn how much of the situation to ascribe to it.

Idealism has been guilty, historically, of arguing from what is only a methodological difficulty. It has created the appearance of a significant affirmation by concealing a redundancy. No one would think it worth while to say, "It is impossible for me to discover anything which is, when I discover it, undiscovered by me," or, "It is impossible that anything should remain totally unknown after it has become known"; but to say, "It is impossible to discover anything that is not thought," or, "It is impossible to find anything that is not known," has seemed to many idealists to be the beginning of philosophical wisdom—in spite of the fact that the self-evidence of the last two propositions consists entirely in the fact that "discover" and "thought," "find" and "known," are taken as meaning the same thing.

My contention has been, then, that the "ego-centric predicament" creates not the slightest presumption either for idealism or for realism. It is equally compatible with either alternative, although it has been, and still is, very generally supposed to nourish idealism and to stick in the crop of realism.

So far idealism is seen to rest on bias or ambiguity. The other arguments which have been advanced in its behalf are deserving of more respectful consideration, since they appeal to material facts for which any alternative theory must provide.

The oldest of the idealistic arguments are those which idealism shares with scepticism. Idealism has been held sometimes to *be*

scepticism, sometimes to furnish the only authentic *escape* from it. Arguments of this general class may be summarily treated under the heads of "physiological relativism" and "psychological relativism."

Physiological relativism rests on the fact that sensation is doubly conditioned: externally, by a physical stimulus; and internally by the position, properties, and state of the organism. Sensation is then construed as the joint product or appearance created by these factors. At this point of the argument three alternatives diverge. The confirmed sceptic will hold that sensation, untrustworthy as it is, affords the only knowledge we possess, since thought is only its paler reflection. This is idealism of a sort, but a bankrupt, insolvent idealism—patently self-contradictory. The two remaining alternatives are realistic. The physico-chemical realist credits scientific thought as a way of escape from the subjective relativities of sensation. The agnostic realist, holding with the sceptic that physico-chemical concepts are only reproductions of sense-experience, and equally subjective, still credits the residual reflection that sense-experience is produced by the action *of* something he knows not how *upon* something he knows not what. It is clear that, whatever their validity, arguments from physiological relativism afford small comfort to the idealist.

Psychological relativism is a scepticism of thought rather than of sense; indeed, it is often used as an argument in support of sense. The argument rests on the fact of prejudice. Thought is held to be an effect of emotion, will, habit, imitation, historical development, or social *milieu*; and reality, as man thinks it, to be a mere projection of human bias. Here, again, three paths diverge. If, in the first place, one appeals from thought to sense on the ground that sense is externally controlled, one moves in the direction of the scepticisms and realisms already considered. The second alternative is to rest in the relativity of thought, or to accept psychological scepticism as the last word. This view, that the world is what man thinks it, and that man's thinking of it varies from individual to individual and from time to time, is a widespread doctrine in modern philosophy; but it is not that

idealism with which I am here concerned. The third alternative, the absolute idealism which modern realism seeks to slay, is an idealism which has already slain and devoured scepticism, and which rests its claim to acceptance largely upon that conquest. Psychological relativism is held to be intolerable, because it gives equal credit to contradictory human assertions, and because, since it places nature inside of a mind which is itself inside of nature, it is viciously circular. Realism and absolute idealism here take the same ground, and both attribute to thought a power to recognize and transcend its own relativities. The difference lies in the nature of this corrective thought. For realism its nature lies in its more perfect fidelity to fact, or in its more dispassionate and colourless objectivity. For idealism its nature lies in its profounder and more authoritative subjectivity. For realism thinking truly is a conformity of mind to the given reality, while for idealism thinking truly is a conformity of the finite mind to a universal mind.[1]

This resort to absolute idealism as the way of escape from psychological relativism involves two steps, both of which the realist refuses to take. The first step is to discredit sense-perception. The relative passivity of this mode of experience, instead of being construed as a mark of cognitive superiority because it suggests a deference of the knowing mind to its objects, is construed as a mark of inferiority because the genius of the mind itself is too imperfectly manifested. Sense becomes a virtual, incipient, or degraded form of thought. The absolute idealist can usually be recognized by his insistence that pure sensation is a myth, but pure or impure he can hardly deny it, and it still remains as one of his most serious stumbling-blocks.

The second step is to construe thought as essentially creative. There is a widespread disposition (a disposition connected, no

[1] Since this universal mind may be itself governed by will or emotion, as well as by cold logic, absolute idealism does not necessarily imply the rejection of moral, æsthetic, or religious experiences as sources of metaphysical insight. Any idealizing activity of mind, in which man recognizes the gap between aspiration and present attainment, may be taken as a revelation of that standard spiritual being whose self-realization furnishes the motive force of creation.

doubt, with the common-sense dogma that if things are not physical they must be mental) to suppose that the objects of thought, such as laws, mathematical quantities and forms, principles, categories, concepts, universals, necessities, possibilities, relations, and systematic unities, are the *creatures* of thought. Since the orderly structure of nature, as exhibited in the sciences, would fall to pieces without such connective tissue, this supposition is of decisive consequence, and is chiefly responsible for the hold of modern idealism upon those "tougher" minds which are not affected by its sentimental appeal.

Hence the rejection of a subjectivistic logic, and mathematics is one of the major arguments in the realistic polemic. Claiming the support of Socrates and Plato, and alliance with the whole stream of philosophical doctrine down through the Scholastics and Cartesians, modern realism distinguishes between the imaginative play of speculative thought, on the one hand, and, on the other hand, those moments of insight, acceptance, or contemplation in which the mind is confronted by a being not of its own making. Thought has moments in which its own caprice is superseded by specificities, connections, and consequences as intrusive and inexorable as the resistance of material bodies. One may think what one will, but having thought one finds oneself involved in natures and relations which have a way of their own, a way which must now be loyally followed if one is to think truly. The realms of mathematics and logic are not governed by psychological laws, but by laws intrinsic to themselves. Idealists recognize this autonomy, and thereupon extend and exalt the meaning of mind to embrace the larger domain. But to confer the term "mind" upon the intelligible features of the world, whether viewed abstractedly in hierarchies of categories, or concretely in the systematic unity of nature, can serve no useful purpose. It adds nothing to our understanding of that specific mode of natural existence associated with animal bodies from which the term "mind" derives its original meaning, while at the same time it invests the intelligible features of the world with an aspect of complaisance to man, and thus flatters hopes that it does not really justify.

No summary of idealistic arguments would be complete without mention of that argument which idealism shares with spiritualism. The distinctive mark of modern idealism is, I believe, its annexation of the object to the act or state or mode of knowledge, whether in the Berkeleyan or in the Kantian manner. But modern idealism also absorbs and continues a strain of metaphysical speculation which is much older. According to this older or spiritualistic view, the metaphysical demand for a substantial being and an originating cause can be met only by self-consciousness, which, as intuitively apprehended, dissolves the dialectical difficulties which beset the time-worn topics of the "one and the many," "the thing and its qualities," "identity and difference," "freedom and necessity," and "infinity." Mind, so it is alleged, is superlatively and exclusively qualified for reality. This view rests, however, on the assumption that the nature of mind is self-evident. Modern realists, for the most part, reject this alleged revelation in the name of patient observation and rigorous analysis. They regard the nature of mind, not as the primal insight, but as a highly complicated and baffling problem which possesses in an eminent degree whatever difficulties beset the problem of reality in general.[1] The first personal pronoun is felt to resemble a question-mark more than an exclamation point.

To these counter-arguments, by which realism has disputed the claims of idealism, I should like to add the difference of philosophical method and attitude which has often divided these opposing schools. It was not an accident that realists should have formulated a platform and attempted collaboration. Anglo-American idealism, impregnated as it is with the romantic tradition, has encouraged the individual to regard himself as an authoritative organ of truth, or a fountain of lyric self-expression.

[1] I have argued that the idealist's position rests here upon a confusion between the apparent simplicity of the familiar or the innocence of the eye, and the objective simplicity which survives the effort to distinguish an internal multiplicity. I have termed this error "the fallacy of pseudo-simplicity." Cf. "Realism as a Polemic and Programme of Reform," *Journal of Philosophy*, vol. vii (1910), p. 371.

To members of such a cult every attempt to define terms or to organize research must necessarily be abhorrent. Realists, on the other hand, cling to the naïve view that in the presence of common objects two philosophical minds should be able to find some area of agreement, or at least to localize and formulate their disagreement. The realist is baffled and annoyed by what seems to him the arrogant obscurity of idealism, which appears to claim the licence of poetry without assuming its artistic responsibilities. For the same reasons the realist is attracted by the use of the mathematical method, as a possible means of rendering philosophical discourse genuinely communicative, and philosophical discussion profitable and conclusive.

There is another incompatibility of temper which has divided idealists and realists. Idealistic metaphysics is essentially an a priori doctrine. Its central reality is inferred and not experienced. Indeed, the whole realm of human experience is disparaged as appearance. There is a tendency to solve problems in principle rather than in detail, or merely to read them by title. Since truth consists in the light shed by the whole on the part, since the Absolute is thus by definition the supreme solver of problems, and since all other minds are tainted with finitude, there is a temptation to rest cheerfully in the midst of unconquered difficulties, even when they are difficulties of the philosopher's own making. But pious resignation is not fruitful in philosophy. Whatever be the reasons, it seems to me in any case to be a fact that the idealist has contributed nothing to our understanding of infinity and continuity comparable with the contributions of the mathematical logician; and nothing to our understanding of the nature of consciousness, perception, matter, causality, or the relation of mind and body, comparable with the contributions made by their contemporaries of the pragmatist and realist schools. Idealists have been system-builders and have staked all on the monumental perfection of the whole. James, Bergson, Russell, and Whitehead, on the other hand, pay as they go. You do not have to be converted to their gospel in order to profit by them. They abound in suggestive hypothesis, shrewd observation, and delicate analysis which you can detach and build into your own

thinking. The newer philosophy which has grown up in opposition to idealism, and which has set a fashion which even idealism is now adopting, has something of the fruitfulness of empirical science. It is achieving results which, because of their factual basis, may survive the decline of the systematic theories in which they are presently embodied.

Such, in brief, is the train of argument by which I have justified my own dissent from idealism, and in which for the most part I have been in agreement with those of my American colleagues who in 1910 formulated a "Programme and First Platform,"[1] and in 1912 wrote in collaboration the volume entitled *The New Realism*. The defence against the idealistic argument is only a part of the realistic polemic, but it is the most indispensable part—the declaration of independence, by which a new philosophy has sought to gain diplomatic recognition. This war of liberation has, it is true, been supported by an invasion of the enemy's territory. But here the chief weapon employed has been that charge of solipsism which is as familiar to idealists as to their opponents. Realism has, furthermore, been compelled in turn to consolidate and defend its own position. But the historic significance of the American movement at the opening of the present century will, I think, lie in its having revived and modernized a way of thinking which, in spite of its antiquity and its agreement both with science and with common sense, had at the close of the previous century been consigned to the obituary columns of the most authoritative philosophical organs.

Absolute idealism, at the very moment of its seeming triumph over naturalism, was attacked on both flanks: on the one by pragmatism, and on the other by the new realism. The former attack came first and had already lowered the morale of the idealistic forces when the realistic onslaught occurred. The issue of the battle is decisive only in the sense that the supremacy of idealism is destroyed. The hopes of naturalism, as well as of

[1] *Journal of Philosophy*, vol. vii (1910), p. 393.

medieval scholasticism, have revived owing to assistance received from unexpected quarters. The idealists, though checked, have rallied. Pragmatists and realists have fallen afoul of one another at the point of their convergent attack. Former enemies are fraternizing. Ranks are broken and regimental colours are abandoned on the field. What have realists to contribute to the reconstruction that now promises to follow after war?

The answer to this question is too long and too recent a story to find a place in this brief retrospect. Furthermore, it does not belong, in any exclusive sense, to an account of realism. Still less does it belong to my own personal philosophical autobiography. Indeed, that which is most characteristic of the present moment in philosophy, as I understand it, is a confluence of currents which have hitherto run in separate channels. We are (and I am glad, as well as convinced, that it is so) less inclined than formerly to pride ourselves on partisan loyalties and polemical victories. A contemplative observer of the times would have great difficulty in describing its characteristic philosophical activity in terms of the doctrinal cleavages that were so well marked at the opening of the century. Its most conspicuous feature is, I think, an avoidance of the dualisms and disjunctions with which the influence of Descartes is associated. This attitude is due in part to recent changes in science, in part to a revival of interest in ancient and medieval philosophy, and in part to a growing sense of the inadequacy of any of the sharply antithetical alternatives which divided the thought of the last century. Conceptions such as "pattern," "aspect," "pure experience," "essence," "emergence," "event" owe their present vogue to the hope of healing the breach between mind and matter, soul and body, religion and science, teleology and mechanism, or substance and attribute. Viewed in the light of this conjunctive or reconciling motive, there is a recognizable strain of similarity in the thought of James, Bergson, Husserl, Alexander, Bosanquet, McTaggart, Stout, Whitehead, Russell, Broad, Dewey, Santayana, Strong, Montague, and Holt. It would be pretentious and unwarranted for realism to claim the credit for this tendency, but it would be blind to deny that the

Anglo-American realism of the first decade of the century helped notably to prepare the way.[1]

II. A Practical Creed and the Reasons Why

That element in my composition which inclined me in earlier years to the Christian ministry is accountable, no doubt, for my sustained interest in moral philosophy,[2] an interest which in recent years had broadened to embrace the whole realm of "value." The passing of years, the habit of philosophizing, and, perhaps, the changed atmosphere of the times, have combined to give this interest more of reflective detachment and less of that reforming zeal which once burned within me.

At the foundation of my moral philosophy lies a temper of mind which I take to be the same as that which has led me to the rejection of idealism in other fields. Knowledge I regard as essentially a facing of facts, the conforming of a belief to that which, relatively to the belief, is antecedent and fixed. As between knowing and the object-to-be-known, it is the latter which, under the rules of this particular game, makes the first cast of the die. It is a case of "I match you," or, to use a better analogy, the lock is prior to the key. If the cogitans-key does not fit and unlock the cogitandum-lock, then it is the key and not the lock which has failed, and for which a better must be found. One who identifies himself fundamentally with this view of the rôle of cognitive mind, finds himself committed to a certain fundamental attitude in practical philosophy. He will endeavour, in taking account of his cosmic fortunes, to purge himself of preconceptions and of emotional bias. He will not ignore the human tendency to fashion reality after the human heart, or in accordance with human ways of thinking; on the contrary, he will be peculiarly alive to these disturbing factors in order, if possible, to correct the findings of his compass. Nor will he, merely because he does not wish to be blinded by the emotions, be in the least inclined to disparage them. The love of a fellow-creature may be the most sacred and

[1] Cf. my article entitled, "Peace without Victory in Philosophy," *Journal of Philosophical Studies*, vol. iii. (1928), p. 300.

[2] Cf. *The Moral Economy*, 1909.

the most powerful thing in a man's life, and yet, like a good physician, he may most scrupulously refuse to allow his hopes and fears to colour his judgment of the facts. He may realize that if his knowledge is to serve his passion, it must first be dispassionate. To the realist it is not even necessary that belief should be limited to evident facts. The man who can best afford to indulge in "over-beliefs," or in a faith supported by love and hope, is the man who is aware of the difference between cash and credit or between science and poetry. It is confusion, and not feeling, imagination, or conviction, which the knowing mind has most to fear.

In this context there is one specific doctrine that I should like to single out for special emphasis. It is essential to realism that a fact should not be construed as the creation of that act of mind which we designate as the knowing of it. But this does not at all imply that the fact in question should be non-mental. It would, of course, be palpably absurd for a realist, as for any other philosopher, to deny that there are mental facts. That which at any given moment I undertake to know may even be an act of my own cognition. In such a case there are two acts of cognition —the act-of-cognition-to-be-known, and the superadded act-of-knowing-it, both acts falling within that complex unity which the first personal pronoun is used to designate. What is true of cognition is *a fortiori* true of emotion. While emotion must not deflect knowledge, or substitute its own fond imagining for the intended object, an emotion is itself a kind of fact. Hence it is in no wise inconsistent with a fundamental realism to suppose that good and evil are emotionally conditioned.

Let me restate as simply as possible a view for which I have elsewhere argued at length.[1] The value of any object, in the most inclusive sense, as distinguished from its indifference, consists of that object's *moving* quality. Positive value (good) embraces the various modes of *attractiveness*, such as "desired," "loved," "joyous," "charming," "alluring," "auspicious"; negative value (bad) embraces the various modes of *repulsiveness*, such as "odious," "alarming," "portentous," "distasteful." In taking

[1] *General Theory of Value*, 1926.

this view, I dissent from those who hold that the positive value of an object consists in its colour, shape, unity, harmony, or universality—its negative value in the absence of these characters, or in their opposites; and I dissent from those who hold that "good" and "bad" are terms for which there are no equivalents, referring to unique qualities other than such as are mentioned above. I do not, of course, mean to deny that unified, harmonious, or universal objects are good, but only that if this be so it means that unity, harmony, and universality are attractive.

In the next place, attractiveness consists in attracting, and repulsiveness consists in repelling. In taking this view I dissent from those who hold that the various modes of attractiveness and repulsiveness can inhere in objects unrelated to minds. Attractiveness and repulsiveness are not those elements in an object *by virtue* of which it evokes feeling or will, they *are* the evoking of will and feeling and mean nothing apart from motor-affective response.

Finally, in order that a given individual may know that an object possesses the moving quality which constitutes value, it is not necessary that *he* should be moved by it; any more than, in order to know that an object is destructive, it is necessary that he should be destroyed by it. In the knowing of value the knower's own will and feeling is no more involved than in his knowing of anything else. It is true that in so far as I am conscious of being attracted or repelled by an object I know that that object is good or evil, but such evidence is no more authentic than the consciousness that somebody else is attracted or repelled by it. In taking this view I dissent from those idealists who hold that the knowledge of an object's value is inseparably one with the emotional response which makes it valuable. According to idealism, there can be no such thing as the discovery or recognition of a value already there, nor can a value possess that character of independence which facts are assumed to possess when they are cited in proof or disproof of judgments made about them.

Idealism seems to me, here again, to reduce to the same untenable alternatives solipsism, relativism, absolutism. The solipsist

says, "Only what I approve is good, only what I disapprove is evil." Idealistically he cannot be argued from his position, because it has been conceded to him in advance that he can know values only in the approving or disapproving act of making them. Relativism is the illegitimate generalization of this position—doubly illegitimate: first, because the generalization itself claims to be true about values, despite the fact that it is neither an approval nor a disapproval; second, because solipsists contradict one another. One solipsist is justified in saying: "This, since it attracts me, is good"; another, in saying: "Since it does not attract *me*, it is not good." Thereupon idealism enters and redeems a situation for which it is itself responsible. The prerogative of creating values in the act of knowing them is now reserved for a universal Approver and Disapprover, alleged to be the *real* will and feeling of all finite individuals, or their will and feeling when they will and feel as they ought. An original idealistic sin is atoned by a tardy idealistic repentance. The remedy is gratuitous, since the disease was avoidable; and it is ineffectual, since the resulting problem of the relation between the Absolute and finite man is only a new name for the old problems with which the whole inquiry began.

The issue is central to ethics and the social sciences, since it touches the question of the logic of moral reasoning. Realism transcends moral egoism from the outset, judgments of right and wrong being attested, not by the will and feeling of the judge, but by wills and feelings generally. Similarly, authority, whether of conscience, State, or God proceeds from the greater goods which these powers represent. If the judgment of conscience is authoritative over the judgment of appetite, it is because conscience affirms truly that the integral good is better than any of its parts, which the appetite blindly denies. If the State, speaking for the nation, is authoritative over the individual, speaking for himself, it is because the good of all members of a nation *is* better than that of one of its individual members, all being greater than one. The authority of God has to be justified in the same way as the judgment which correctly sets the claims of a universe above those of either individual or nation. Authority, in other words,

attaches to a true judgment as to what is best—true, namely, as agreeing with the nature of what *is* best.

Idealism, on the other hand, must hold that as nothing can be known to be good save in the very act of feeling it or willing it, so nothing can be known to be better or best save in the act of *preferring* it. You cannot, by this logic, argue with the egoist except in terms of his existing bias. There is no fulcrum of fact by which you can dislodge him. You may seek to arouse his "higher self," or to appeal to his "collective will," or to quicken his "divine spark." If, as unfortunately happens, you find none of these things in him, the matter ends there; for you have conceded in advance that so far as *his* judgment is concerned *his* preference shall be final. You cannot even argue that a unified self, or a social will, or a divine Love *would* be better than his present disposition, for on your idealistic premises he can have no evidence of their being better until he already possesses them.

Such a philosophy tends to a confused psychology as well as to an impotent logic. Clinging to the common belief that personality, sociality, and humanity *are* objectively better, or that their betterness possesses a validity that is binding on all individual judges, the idealist imputes to all individual judges a disposition to prefer them. In default of observable facts, he appeals to latencies and virtualities. Logically, the result is to destroy the force of moral reasoning. An obligation cannot be said to be binding until it is acknowledged, but then the time for its argument is past. If there is any virtue in moral reasoning, it must lie in its power to prove the claims of the ideal upon one to whom the ideal as yet makes no appeal: the claims of conscience upon the creature of passion, the claims of society upon the selfish individual, the claims of the State upon the lawless rebel, of international accord upon the chauvinist, or of piety upon the worldling. There is but one method by which this can be done, by assuming, namely, that a certain projected course of action is intrinsically superior, because of the greater value which it embraces or promotes; that it would be superior, though no man should adopt it; that it is really superior, though no man deems it

so, or actively prefers it. Only in this way is it possible to legitimate the title of an authority when it is refused allegiance.

I have emphasized this question of the logic of the moral sciences, not only because it furnishes the link between these fields of inquiry and a man's general philosophical position, and distinguishes, as I believe, between the way of the realist and the way of the idealist; but also because it deeply underlies the practical creed with which I should like to conclude this personal confession. I suspect egoism, opportunism, dictatorship, militarism, theocracy, and mysticism (strange bed-fellows) of being the practical sequel to a theory which finds the ground of authority in the will or feeling of the judge rather than in the correctness of his judgment. I myself am one of those lonely beings who used to be called "liberals," and who are now viewed with suspicion both from the left and from the right. I have always held, and do still hold, to that view of life which I have always supposed, and do still suppose, to be Christian and democratic. The best way, I think, is the way that provides for the happiness of mankind, severally and in the aggregate. All individuals without exception are "equally" entitled to so much happiness as their multiplicity and differences, their inherent capacities, their common environmental resources, permit. The major problem of life is to promote sentiments and devise modes of organization by which human suffering may be mitigated, and by which every unnecessary thwarting of human desire may be eliminated.

If I am asked *why* I define the goal of endeavour in these terms, my answer is simply that if happiness be good, then the happiness of all is better than the happiness of one, and an innocent or radiant and fruitful happiness is better than a happiness which is produced at the cost of unhappiness. The pre-eminent good of the general happiness of sentient beings I hold to be a fact which is independent of judgment or sentiment, in the same sense as is the fact that a pair is greater than one of its members, or that a century of history embraces a greater span than one of its included decades. This greatest good may meet with neglect or cold

indifference, without being in the least invalidated thereby. It is *there*, to be pointed out for the illumination or edification of mankind. From this stubborn objectivity the faculties, sentiments, maxims, and institutions of men derive such legitimate authority as they possess; legitimate, not in the sense of any law formulated and enforced by God or men, but in the sense which the philosophers of the seventeenth and eighteenth centuries obscurely intended when they spoke of "natural law" or the "law of reason."

It is this first principle, with its irrevocable force and its indifference to human ignorance or weakness, which justifies to me the major tenets of the Occidental and American tradition. Evil is as stubborn a fact as good, and there is no metaphysical sleight of hand by which the worse may be *made* the better course, however much it may *appear* to be. Hence the final truth of moral dualism. The greater good is not the mere outcropping of the deeper natural propensity, but can be attained only by the procrustean fitting of plastic materials to a mould defined by reason. Hence the profound truth of moral rigorism. Convinced as I am of the indefeasible, though partial, truth of dualism and rigorism, the contemptuous dismissal of Puritanism strikes me as atavistic or sophomoric rather than as evidence of philosophic emancipation.

This same criterion of the universal happiness of individuals justifies the Christian doctrine of love, not merely as poetry, but as science. Judged by the same criterion, the ideal polity must be that in which the happiness of citizens is the end, and their enlightened consent the seat, of sovereignty; or that form of society in which men rule themselves by discussion, persuasion, and agreement, for the sake of their common and maximum happiness. Hence democracy strikes me as Utopian only in the sense in which the best is always beyond the reach of present attainment; and the sceptics of democracy appear to me, not as shrewd political discoverers (for the failures of democracy are as old as human history), but as shallow opportunists, or victims of circumstance, or blind fanatics, or rhetorical adventurers, who are unconsciously retracing more primitive stages of political development.

By this same principle, I judge some general concord among the nations of the earth to lie ahead on the upward path by which men have painfully ascended from the condition of beasts who prey upon their own kind. I can understand those who believe that such a concord lies upon a remote, or even an inaccessible, summit. I can understand its discouraged or even its despairing devotees. But in the cynical or gleeful enemies of international peace, in those who refuse even their homage to such a cause, I can see only a recrudescence of original sin.

Finally, it is by the same principle that I find myself compelled to judge of religion. I would not belittle the comforts and compensations yielded by religion, but a *true* religion must be that which confirms man's humanity to man; or which, like Christianity, conceives the object of worship as compassionate and beneficent. The Father who pities his children is the superlatively appropriate symbol of God, not because the worshipper, being one of the children, may hope to profit by paternal indulgence, but because all-reaching and infinitely patient love is the one thing supremely worshipful. Nietzsche's rejection of Christianity strikes me, therefore, as intelligently and absolutely false; while the little Nietzscheans assume in my eyes the rôle of bad boys who have happily found an adult to justify their incorrigible naughtiness.

It is evident, then, that in practical matters I am old-fashioned —that is to say, Christian and democratic in the historic senses of these terms. Much of what is now taken to be prophetic appears in my eyes as a tedious revival of old errors, not infrequently prompted by juvenile delinquency. Or, since Christianity and democracy were once revolutionary, and are still regarded with suspicion by the friends of tyranny and established privilege, I might describe myself as one who is revolutionary enough to remain loyal to the great revolutions of the past.

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PERSONAL REALISM

By JAMES BISSETT PRATT

Born 1875; Professor of Philosophy, Williams College, Williamstown, Mass.

PERSONAL REALISM

THE first call that I heard to the philosophic life—in addition to my mother's influence—came to me, I suppose, through the reading of Emerson, Epictetus, and Marcus Aurelius. That was probably when I was about sixteen. I have read but little of Emerson since I was twenty; but during those four impressionable years he came to mean so much to me that as I look back over my life I think his was the greatest literary influence I have ever felt.

The seed he had to sow fell on soil well prepared; for on my mother's side I come from a line of Scotch Protestants who were deeply interested in ultimate problems. My mother's father, Dr. David Murdoch, was a Presbyterian minister who left Scotland to help evangelize Canada, and eventually was led, by his love of democracy, into the "States." My father, Daniel R. Pratt, though born in New York State, came from Connecticut Yankees on both sides, who traced back their line to the early days of Massachusetts Bay. I was born in Elmira, New York, on June 22, 1875, and educated in the Elmira Schools, till I went to Williams College. It was in part through the influence of my beloved teacher, Professor John E. Russell, that the attractions of philosophy grew upon me, till I determined to give my life to it.

A year of graduate study at Harvard (1898–99), with the very confusing experience of hearing James, Royce, Palmer, Münsterberg, Everett, and Santayana, each refuting in large part what the other taught—made me temporarily satiated with philosophy, and in deference to my father's wish that I should give up philosophy for law, I left Harvard and spent a year at Columbia Law School. The old call of philosophy, however, still sounded in my ears, and after one year at Columbia and two years of teaching Latin in the Elmira Free Academy, I returned to my first love, and went to Berlin (in 1902–3) for further study. I must confess to having been rather disappointed with what I found. Paulsen and Pfleiderer were indeed inspiring teachers, but on the whole I found the courses at Berlin much more elementary and much less thorough than those at Harvard. Therefore, after some

months of travel in Europe and the Near East, I returned to America and in the autumn of 1903 went back to Harvard, where I remained two years, receiving my doctor's degree in June 1905.

The philosophical influences I felt at Harvard centred around two foci, the one James's realistic pluralism, the other the idealistic monism of Royce and Palmer. James's influence was at first supreme, and his concrete manner of thinking, his empirical point of view, have been, I suppose, more potent than anything else in the development of my intellectual life. Royce's influence was at first much less strong upon me. But when in my last year at Harvard, James was no longer giving courses, and Royce was reinforced by Palmer (in the Seminary on Kant and Hegel), the lure of idealism began to grow.

My doctor's thesis at Harvard was not in the field of philosophy in the narrower sense, but in that of the psychology of religion. In writing it I took Professor James as my chief guide. The general subject of the religious consciousness occupied most of my attention, not only during my last year at Harvard, but for a number of years after coming to Williams College as instructor (in 1905). My first book (*The Psychology of Religious Belief*) was on this subject, as was also the book to which I gave more years of work than to any other I have yet written, the *Religious Consciousness* (1920). All sorts of influences shared in making this work possible—the continued influence of James's thought, much reading and considerable study of religious conditions in Europe and India, and the helpful insight of my wife. I should add that though my work in this field led me rather aside from the main stream of philosophic thought, it was not without its influence on my more fundamental philosophy: for it steadily strengthened my confidence—as apparently a similar study strengthened James's —in the ultimate significance of the religious consciousness.

The growth of my epistemological and metaphysical views, during these early years at Williams, tended for a while away from James. I had never been able to go all the way with his Pragmatism, and the anti-intellectualism which under his leadership and that of Dewey and Schiller carried so large a part of the philosophical world with it in the first decade of this century

seemed to me perilous for the life of the mind. Hence my little book *What is Pragmatism?* (1909), in which I attacked my beloved master with as much violence as my affection would permit—an attack which he received in the large and understanding way which so characterized William James. But it was not only negatively that I was tending away from the position of James. For several years I made an earnest attempt, in my thought and in my teaching, to mould my philosophy on the model of Royce or Hegel, and I may at least say that I made an honest and prolonged attempt to be an idealist.

I did not succeed. The epistemological arguments of idealism had never been really convincing to me, and the conceptual methods of the Hegelians never had for me (I knew it in the bottom of my heart) the ring of reality. The lessons of William James had been learned too well. I cannot say that I ceased being an idealist, for I never really had been one; I ceased trying to be one. I admitted frankly that while probably neither side of the controversy could fully prove its point, the realistic version of the epistemological situation seemed to me immensely more probable than the idealistic. Neither of the attempts, however, to resuscitate realism, which were being made at the time on the two sides of the Atlantic—the English New Realism and the American Neo-Realism—appealed to me: and my earnest search was for a realistic view which would neither commit itself to the impossible positions (as they seemed to me) of the new schools, nor yet return merely to the Lockean form.

It was at this rather critical moment in my thinking that the American Philosophical Association determined to devote a large part of its 1916 meeting to a discussion of the physical and the psychical: and, fortunately for me, I was asked to act as one of the leaders of the discussion. Each of the leaders was requested to publish a paper before the meeting, expressing his position on the topic to be discussed, and in conformity with this request I wrote "The Confessions of an Old Realist," which appeared in the *Journal of Philosophy* for December 7, 1916. My paper at the meeting of the Association was entitled "A Defence of Dualistic Realism" (published in the *Journal of Philosophy*, May 10, 1917).

The discussion at the 1916 meeting was in some ways disappointing; but for a few of us it did one important thing. There were four or five of us at the meeting whose thoughts had been developing along parallel lines, and there we discovered each other. Thus was formed a little group which met once or twice a year for several years, and which through these meetings and a rather lively correspondence at length formulated the epistemological point of view known (rather inappropriately, I think) as Critical Realism. The conclusions we finally reached in this attempt at cooperative thinking were published toward the close of 1920 under the title *Essays in Critical Realism*.

The reasons which led me to this realistic position have been stated at length in more places than one and can hardly be repeated here. Very briefly I will say that I find it impossible to construe my experience satisfactorily without recognizing the fact of transcendence. In the act of perceiving and conceiving the mind *means* more than it *is*: it refers to, intends, makes assertions about, other realities than its own states. The assertion of Locke that "the mind hath no other immediate object save its own ideas" not only is false, it is the root of many hopeless vagaries in both epistemology and ethics. For one who denies this power of transcendence on the part of the mind, the only logical position would seem to be the extreme form of solipsism, or else the denial of the subjective altogether. But if one is unwilling to take either of these extreme courses, it would seem difficult to avoid the assertion that the object which the mind refers to need not be existentially identical with any of its mental states. This last assertion, rather than the "essence" doctrine, I regard as the central thesis of Critical Realism. But it must not be forgotten that this assertion involves the principle of transcendence. And transcendence is a principle of wider import and application than Critical Realism. For me, at any rate, it is as fundamental to ethics as to epistemology: and once recognized there it undermines the whole psychological argument for egoistic hedonism.

Critical Realism was intended and is maintained as a purely epistemological doctrine. It would be strange, however, if it had no bearing on the problems of ontology. There is, to be sure, little

agreement among critical realists as to what this bearing may be. Several of the members of the group that wrote the "Essays" have developed out of their epistemological realism a naturalistic metaphysic. As I view the question, the logic of the thing runs quite the other way. The concept of a mind that can and does transcend itself—which is the very centre of Critical Realism—would seem to me to imply a uniqueness on the part of mind such as to separate it rather sharply from the physical world and from mechanistic nature. This view of the mind I have to some extent developed in the little book, *Matter and Spirit*, published in 1922, in which I tried to show that the relation of body and mind is a question that cannot be dodged, and that among the solutions offered since the rise of Western thought, interaction is by far the most satisfactory. Now if this be true, if the mind can both transcend in its meanings its own states and can also affect the activities of the body, we would seem to be faced with the fact of a *dualism of process* in our world, the one mechanistic, the other teleological; the one the processes of unconscious "matter," the other the activities of selves. And I may add that the direction of my thought during the six years since the completion of *Matter and Spirit* has been ever more confidently toward some form of personalism. I cannot (as yet, at any rate) go the whole length of the "personalist" school and interpret Reality as a whole or in all its parts in personal or panpsychic terms; but I do feel that the reality and efficiency of our own human selves is one of the hard facts which philosophy is bound to reckon with. The acknowledgment of this fact, moreover, would seem to be of grave significance. If there are selves, if in knowing and willing they can and do transcend their own psychic states, if they can act upon their bodies and through their bodies in such fashion as to change the outcome of the mechanistic laws of "Nature," then this is a fact which characterizes not only the selves in question but the universe in which they live. The world we live in is the kind of world which continually produces selves.

One more influence that has contributed to the shaping of my metaphysical attitude must be mentioned before I close these personal confessions—the influence, namely, of Oriental thought.

My interest in the history of religions, and especially the religions of India, was aroused during my first year at Harvard by Charles Carroll Everett, of blessed memory. This interest was deepened by the lectures of Otto Pfleiderer in the University of Berlin; and my own serious and detailed study of the non-Christian faiths was begun under the guidance of George Foot Moore. Ever since I came to Williams College in 1905 I have given a course on the history of religions and my interest in the subject, particularly in the religions of Indian origin, has steadily grown. In order to gain more immediate contact with and first-hand knowledge of these religions I spent the larger part of two sabbatical years in the East, particularly in the study of Hinduism and Buddhism, and my two longest books[1] have been devoted to them. They are to me matters of much more than antiquarian interest. During all the years that I have spent developing a pluralistic realism, the undertone of the Upanishads has, strangely enough, never been long out of hearing. The monistic idealism of the Vedanta and the Mahayana has a kind of emotional and poetic charm for me in spite of my intellectual adhesion to a pluralistic and possibly dualistic philosophy. My long study of mysticism and the religious consciousness reinforces, I suspect, the influence of Oriental thought; and I cannot say with the assurance I should have felt some years ago that Hindu and Buddhist Monism are quite mistaken. Is my personal realism necessarily incompatible with the ancient insight of the East?

As yet I do not know. It may be that some day I shall have to resign one or both of them altogether. It may be I shall yet find some kind of synthesis that shall transmute and save them both. Most likely of all I shall never come to any definite conclusion, but shall continue to wonder to the end of my days. At any rate I trust I shall cling to reason and experience as my guides, and, with Socrates, shall "follow the argument." And if that course still leaves me wondering, I am not at all sure that this will be an evil fate. Long ago we were told that our human philosophy begins with wonder; and it may be best that it should end with it. As I view the matter, Philosophy is a persistent attempt to get

[1] *India and Its Faiths*, 1916; and *The Pilgrimage of Buddhism*, 1928.

at the most probable explanation of our experience, to draw the most persuasive and inclusive picture of the world we live in. Just for this reason it is an investigation that can never be complete, a question that can never be finally answered, a path that has no ending. It would be sad if the path ended with my last footprints. And for my own part, I have found the lure of the journey growing all the way.

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EMPIRICISM

By ARTHUR KENYON ROGERS

Born 1868; late Professor of Philosophy, Yale University, New Haven, Conn

EMPIRICISM

In accordance with what I understand to be the intention of the present volumes I shall make no effort here to argue at length the right or wrong of my philosophical opinions; and I submit without regret to the restriction. I have long been of the belief that the only possible hope that philosophers may get together lies in dropping their logic temporarily and telling one another frankly and in plain terms the human interests that engage them. An interest or point of view is much less easy to demolish than a piece of reasoning, and also it is more difficult to brush aside without leaving one open unpleasantly to the charge of narrowness; and with the habit once started of considering sympathetically the point of view of others there is a sporting chance that a man's own outlook on the world may be enlarged.

My first interest in philosophy goes back to the fairly remote days when religion and science were still facing one another with considerable asperity. Though I could not remain entirely unaware of a measure of superior intellectual integrity and realism in the opposing camp, by temperament and training my natural leanings were toward the former side. The current disposition to turn naturalism into a final and comprehensive creed left me dissatisfied. The dogmatic forms of a naturalistic metaphysics did not impress me greatly; I thought then, and I still continue to think when I see the same predilection re-emerging in a more modern dress, that they are sufficiently exploded by relatively clear and simple considerations. But the more fluid agnosticism of scientists like Huxley worried and irritated me. I wanted to know, to find something solid and substantial into which I could get my teeth; and I saw no compelling reason to suppose that this natural desire was incapable of satisfaction.

At the end of nearly forty years I have a good deal more fellow-feeling with the state of mind which faced by the riddle of existence is content to give it up. I have never quite understood how philosophers who have spent their lives in pointing out the absurdity of all metaphysics save their own could retain so placid a faith in the infallibility of one residual line of reason-

ing; and while I usually seem to detect too easy a yielding to emotional or aesthetic prepossessions in those members of the younger generation who have abandoned the quest for ultimate truth before they have really set upon it, I nevertheless have ceased to look as coldly as I once did on the periodic outbreaks against all forms of metaphysics. The very recent revelation of a widespread distrust of abstract speculation which accompanied and partly accounted for the success of Mr. Durant's *Story of Philosophy* ought, I should say, to set the philosopher thinking, and lead him to ask himself anew what significance, if any, can fairly be established for his trade. And I do not know that I can better start my present undertaking than by putting this question to myself, and considering what I should have to say to one who urged that metaphysics is an unnecessary waste of human time and energy.

There is one answer that has no need to give rise to serious controversy. Systems of philosophy have sometimes been justified as works of art, and I am in fact myself inclined to fancy that, as systems, this is their strongest claim. Since they are in large measure mutually exclusive, it is plainly impossible to regard them all as true. But whether he accepts it or not, a philosopher can still take pleasure in an historic system as a beautiful piece of methodic reasoning. Spinoza, for example, will always arouse in the mind that is capable of following him much the same sort of appreciation that another man will find in an epic or a symphony. It is true the number of those who derive enjoyment from this particular sort of thing will always be strictly limited; but that is no reason for disparagement. The aestheticist in particular, who nowadays is most in evidence as a reviler of metaphysics, has no possible ground for condescension except his own incapacity for grasping a complicated intellectual construction, any more than I should have the right to exclude from works of art a fugue of Bach's because it held no message for my untrained ear.

As an answer to one sort of attack on metaphysics this admits, I should say, of no rebuttal; but of course it will not satisfy the real philosopher. I recall many years ago the appearance of a

book made up entirely of mathematical formulas which—so I was informed—would to the expert prove highly diverting as a piece of mathematical humour. Such a display of ingenuity no one could reasonably object to as the by-product of a serious discipline, but it is not the kind of thing that would explain the zeal of the everyday mathematician. And philosophers could not long keep up an active interest if they thought of their labours only as an exercise of logical dexterity. The metaphysician must believe that he has a chance to reach objective truth if he is to take any permanent satisfaction in his work.

There is one such value in terms of truth which the unsympathetic critic almost always overlooks, but which may go a long way toward reassuring the philosopher when beset by disturbing doubts. Whatever else he may or may not be accomplishing, he can console himself with the conviction that it must be worth some pains to clear up the logical meaning of the terms and ideas which constitute the stock-in-trade of humankind, but which the average man makes use of with little or no critical understanding. To the philosopher must go a very large portion of the credit for rendering precise the terms of intellectual discourse and bringing them into something like an intelligible connection; apart from that subtle and technical tracing of the links of logical relationship which so irritates the unfriendly critic, the mind of man would be ruled even more universally than it is by a mass of desultory catchwords. Here lies, I think, a sufficient and perhaps the only answer to the perennial charge that historic philosophy is no more than a rabble of conflicting schools each trying to displace the rest and none actually succeeding. In so far as philosophy is identified with systems of philosophy, this charge is hard to meet, and there seems no special reason to suppose that the addition of more systems will materially change the fact. But every such attempt is likely to contribute something to a clearer understanding of this or that idea in which the author of the system feels a special interest; and other philosophers may profit by this even though its larger context is rejected.

Is it possible to go a step farther and to justify metaphysics

not merely as a clearing up of the intellectual tools of thought but as an effort to understand what Being actually is like? Here more controversial questions will arise; and in taking note of them I come back to my proper theme.

Of course in a sense the alternatives just alluded to are not exclusive. We cannot separate an analysis of terms from a knowledge of reality unless we are prepared to say that the relationships which enter into terms stand themselves for nothing real; and while philosophers have held out for this at times, it is not the most natural conclusion. It is simpler and easier to suppose that any verifiable thread of connection which the mind perceives reveals in so far a character belonging to the real structure of the world. But a strictly metaphysical curiosity assumes something in addition; and this brings me to the first of the dogmas that have had most influence in shaping my own attempts at speculation.

The terms empiricism and rationalism, so far as I know, have never received an authoritative definition, and consequently I shall ask the privilege of giving them the sense that seems to me most useful. By a rationalist I shall mean a philosopher who believes not only that logic is a valid process but that the content of logic, the relational network which mind traces, is itself conterminous with reality or being. The more rigorous of the metaphysical systems have commonly gone on this assumption, tacit or expressed, and it is this alone that renders plausible their persuasion that the intellect is competent to reach an authoritative account of things impervious to logical attack. Hegel is the most thoroughgoing and consistent master of the method, for Hegel alone has tried explicitly to do what on such a showing plainly should be done—bring every human concept into a single articulated whole.

That no one has succeeded up to date in propounding such a system of metaphysics capable of more than a limited appeal might, I suppose, be taken to mean that the philosopher is to look for some new system in the future which will be more fortunate. I prefer instead to think that the cause of failure lies not in any inadequacy of performance but in the method itself.

And the thing which so disposes me is not merely the historic strife of systems, though I should say this ought to arouse a healthy scepticism, but the conviction that there is something of which the method does not take account. And accordingly the distinctive note of empiricism I discover in the recognition that reality possesses a dimension which logical relationships fail to make intelligible. Call it stuff or matter or sensation or what not, *something* is there which is not reducible to conceptual thought; and since deductive certainty has no meaning save in terms of concepts, it follows that any attempt at strict demonstration, whether in the name of idealism or of science, must as applied to the universe at large be marked for failure. There is a factor in experience which we simply find, and whose necessity no conceivable logic can show.

But in calling myself an empiricist I am compelled immediately to supplement my meaning. Traditional English empiricism never appealed to me as highly plausible, for the reason that it is not empirical enough. A technical criticism which nowadays is generally allowed is that the non-conceptual stuff of historic empiricism is thought of in an altogether too disjointed way, which fails sufficiently to recognize that relationships are also real. In this criticism I acquiesce, provided it does not try to say that reality consists of sensations *and* relations. If when we set out to scrutinize the objects of experience we are led to note two distinguishable elements, well and good. But to take such components as more real than the concrete facts from which they were dissected is equally non-empirical and abstract whether the outcome is in terms of particular sense qualities or of relational connections. A genuinely empirical view will get its data from the things that come home to us in first-hand experience, and any metaphysics which results in disrupting these and leaving them without final significance, whatever its claim as metaphysics, at any rate is not empiricism.

What then are the data that common experience presupposes? I do not see much chance of dispute about the general facts. Most unmistakable and closest to man's most deeply rooted instincts is the assurance that we are persons in a community

of persons, actuated by a variety of concrete motives to conduct in which these beings similar to ourselves are very much concerned. In the second place, there exists as a field of action common to us all alike a world on which the satisfaction of our interests is dependent, and which as human beings we can "know" only through the medium of ideas that are not identical with the objects to be known. About this world science has in detail many astonishing things to tell us, and many interesting and curious opinions have been held about its intrinsic nature; but in any case it is a thoroughly real and substantial sort of world, which to all appearance would not be very much put out were the human race to vanish altogether. It is this second item among the prejudices to which I have confessed about which I should perhaps feel most apologetic. Systems of metaphysics have pretty generally hesitated to concede it to the common sense of mankind, and I have always in consequence found myself excluded from that comforting sense of philosophical security that comes from membership in an established and reputable school of thought. It may, of course, be that some way exists of escaping this taint of dualism, but I have never found it; and the rather common practice of escape through closing one's eyes to the break involved alike with our everyday and with our scientific ways of thinking does not attract me.

Of the two main sets of problems that emerge from such a starting-point it was the more strictly metaphysical one that first engaged my interest; what is the nature of Reality *par excellence*? It seemed rather obvious to me, as I have said, that here was a question to which logic was not fully adequate. Since the field of reality pushes far beyond man with his limited capacities, there is an excellent chance that his guesses here may go astray; this leaves agnosticism always open as a last resort, which is no doubt the reason why I was disposed to be scandalized by the agnostic. But I nevertheless thought, nor do I see in the abstract any reason now to change my mind, that a more or less convincing theory might conceivably be devised to meet the needs of speculation once the pretence to demonstrative certainty was abandoned.

There were two reasons in particular which led me to look for such a theory in the general direction of what traditionally has been known as theism, and the first of these, at any rate, has no necessary connection with religiosity. It very early struck me that the condescension displayed by philosophy toward theism was due quite as much to a sentimental prejudice as to any inherent plausibility. It is not surprising that the temper of the theologian should provoke a reaction in the critical mind which leads it to turn away from notions that have a religious connotation as unworthy our intellectual respect. But I do not see that an anti-theological bias has any more right than a theological bias to determine the results of speculation; and the dislike of philosophers for theism appeared to me a little arbitrary. Mind, thought, consciousness—if these are not the most important things in the world, they are at any rate not the least intelligible; and such terms are all abstractions apart from *our* mind, *our* thought, *our* consciousness. The one reality which for the business of living is least open to sceptical distrust is the reality of ourselves; and if knowledge can only proceed by interpreting the problematical in terms of what is known, then the prevalent disposition to hold cheap the notion of personality for speculative purposes might readily be taken as a sign less of superior insight than of that innate preference for the abstract over the concrete which has always put empiricism on the defensive in the metaphysical game.

I must remark again that in my own case I was pointed toward theism less from motives that could properly be called religious than from such logical considerations, and from the lack of persuasive quality in competing brands of metaphysics. In all of these I was impressed by difficulties even more serious than those I found in theism. At the same time it is possible I might have been less firm in my preference for gnosticism had it not been for a second motive.

Along with the philosopher's predilection for the abstract, a further reason has existed for the disrepute of concepts connected with religion in the higher intellectual circles. This is the increasing leaven of utilitarianism in modern society, and the displace-

ment of ideology and an interest in values by the gospel of material progress and success. Such a tendency has acquired a lustre not obviously due in its own right from an alliance with the most important intellectual movement of the day. Not that the scientist is himself a practitioner of the gospel of success; he is more apt to be an idealist of sorts. But whatever the spirit that guides his own activities, his subject-matter is expressly in terms of means or instruments rather than of ideals and ends, and his enormous prestige has lent utilitarianism and pragmatism of the practical variety a standing which offers some excuse for the impression that science and religion are opposed.

Now if, as I suppose to be the case, the central note of religion is the need man has of finding the human values that particularly appeal to him rooted in the more ultimate structure of the universe, a new compulsion will be added to that desire to know which animates the metaphysician; and in this new motive I seemed to find a reinforcement of the special type of doctrine to which independently I had been led. For I have never been able to make the least sense of value terms except as they connect themselves with persons. I do not propose to enter here on an analysis of value. But for my own thought a value in the last resort invariably leads to some concrete feeling of approval such as persons alone experience, and apart from which nothing would be left but bare existence. And accordingly I found logic and motivation both pointing toward the notion of personality as the most likely key to an understanding of reality.

As I have advanced in philosophical maturity if not in wisdom, has the key proved permanently useful? I hardly know how to make an unequivocal reply. Such reason as I own still tells me that on the whole it probably offers fewer difficulties in logic and in fact than any rival hypothesis I have met; and when I am rationally inclined I continue to find my arguments moderately convincing. But I confess that if I set aside ratiocination, as the best of philosophers at times must do, and lay myself open to spontaneous impressions from the encircling world, questionings arise that make them seem rather puny weapons. The sort of fact that casts the deepest shade of suspicion I pass by for the moment;

but just the immensity of things, the pressure of the everlasting and the infinite, is enough in man's humbler moods to give him cause to ask himself whether it may not be presumption rather than sound reason that leads him to think he has the slightest chance of measuring the interminable reaches of existence. Personally I get no kick out of sheer mystery and unintelligibility. The aesthetic cult of pure wonder as a substitute for religion is not for me; unless I could retain a modicum of faith that something in the nature of human meaning lies behind the veil of the unknown, I should feel I was making myself ridiculous by bowing down before mere weight and mass of being. But I am less ready to deny that faith may have to stand alone without logical crutches; and I find some consolation in the thought that perhaps this is not without its gain. Rationalization passes over too readily into talk, and religion that has grown vocal tends nearly always to be cheapened; possibly it would stand a better chance if philosophers and theologians and preachers would let it more alone. At any rate, the impulse to plot out the universe is not as strong as it used to be, and more and more my major interest has shifted.

Whether or not man's thought is robust enough to understand his cosmic dwelling-place, at least he can hope to know something about himself and his own experience; ethics and sociology—I use the latter term apologetically—still leave a field in which philosophy will have scope for some time to come. In point of fact, my empirical bias leads me to suspect that metaphysics here has usually succeeded in muddying the waters; man's life stands a considerable chance of being falsified if it is run into moulds created by the logic of a cosmic principle. I may pause a moment to disclaim any particular sympathy with current positivisms which draw the inference that an interest in human life ought to supplant and lay at rest the urge to any more pretentious form of metaphysics. Man is plainly too small and the world too big to compress reality within the confines of "experience"; and if we are constrained to recognize that reality exists beyond the regions on which the searchlight of experience plays it is an affront to man's natural curiosity to forbid him to let his imagination loose on such remoter and aesthetically more

exciting themes. It is not for me to tell my brother philosopher how he should apportion his time and effort, or to despise him because he does not voluntarily limit his interests to mine. But for the empiricist it will nevertheless be true that the only safe propædeutic to any metaphysics is the unbiased consideration of what man himself is like; and the results will retain their value—their cardinal value doubtless—even in case he has to stop with man and his terrestrial affairs.

This is not the place to do more than set down dogmatically the three or four general conclusions which have been borne in upon me as having the most significance, for a further metaphysics if such a thing be possible, but in any case for the actual business of man's life. First, man is a being who lives in time, or perhaps I should rather say whose experience is incurably and fundamentally a temporal one. In the next place, he is an *individual*, and whatever the ties that bind him to his fellow-man—and these, of course, are numerous and exceedingly important—he also has a life and nature of his own with which he is most intimately concerned. Society is logically subordinate, not primary, and any attempt to make individual man a mere item in some comprehensive social programme or some abstract or concrete universal will have unhappy consequences alike for theory and practice. Again, the most distinctive part of man's nature is to be found in ideals and not in given facts. The things to which he extends a deliberate approval, and not the unthinking demands of his animal constitution, are what determine the ends belonging to his proper human status; and these approvals come home in terms of feeling rather than of sense or intellect. And it follows from this, lastly, that the essence of the ideal is not to be looked for in absolute principles or superhuman virtues, and least of all in those abstract catchwords through which convention or the self-interest of classes attempts to make men submissive to some form of pretended good which carries so little personal appeal that it has to be imposed from the outside. An ideal is simply an end still to be attained which one finds himself desiring, and which also he is able on reflection to view with admiration and esteem. And the only proper instrument consequently for

securing the good or ideal life is man's individual intelligence—a personal and experimental intelligence unawed by glittering phrases or by claims to expert moral authority, whether by the best minds or by custom and historical prestige. It is intelligence moved by a sole desire to know the fact, on the one hand the utilitarian means to the attainment of man's wishes, and on the other his genuine good in the Socratic sense, his veritable preferences and approvals, to the intent that utility may not mislead him and cause him to substitute proximate and pedestrian goals for a permanent satisfaction.

And now one final word about metaphysics and religion. My conviction still persists that any whole-hearted exercise of the practical intelligence in terms of an ideal must needs be backed for most men by a belief, or at least a hope, that the universe is friendly to man and ready to meet him half-way. Were the human race content with material goods, this need would disappear with the increasing conquest of nature by science and industry; and the predominant concern of institutional religion with such blessings has, rightly and naturally, led the modern world progressively to lose interest in what there has been so much historic reason to think of as a mere device for insuring better crops, the dominance of one's own nation over others, and personal success in business or enjoyment. We know by the certain test of experience that man has a reasonable chance of wresting a livelihood from nature without the need for supernatural assurances. But the subtler values are vastly more precarious; and in proportion as one's intelligence is realistic is it likely that as he looks about him he will be tempted to doubt whether natural forces, and in particular the forces that lie in human nature itself, are not too strong for these incipient strivings after a more humane and lovelier career for man, unless we can be permitted to trust that something not ourselves is at work to supplement human efforts.

But now this new and final doubt, I have to grant, is double-edged. My best instincts seem to need cosmic backing if I am to look forward with much hope to their eventual satisfaction; but have I any real ground for thinking that the need is in the way of being met? Or is not the more realistic inference this, that

human ideals are sports that arise sporadically in the evolutionary process with no real relevance to its direction or final outcome? I am afraid my early faith in the supremacy of man's finer tastes has not worn quite as well as I could wish. As I survey the human scene my eye is caught by so many things that offend my sense of fitness—oil scandals and diplomatic lies and Massachusetts justice, the cowardice and stupidity of men in office and their influential backers, the hypocrisy and greed of business, the difficulty of stirring the mass of men to an assertion of their own clear rights and interests, to say nothing of any real generosity of spirit or sense of impartial fairness, the inability even of nobler minds to rise above moral obsessions and shibboleths, the determination of nearly everyone to prevent his neighbours from embarking in their own way on the quest for life and happiness—all this and much more counts heavily when I ask myself whether the ideal of a democratic community wherein each man is allowed, and encouraged, to seek his best good along lines of intelligent and noble living which satisfy the test of reflective approval is indeed an ideal which reality is prepared to gratify.

If the scales do not rest even, and if I still retain some measure of faith in the fundamental soundness of the world in terms of human notions of the good, it is due chiefly to one last consideration for which I do not pretend to offer proof. My own attitude I find varying with my mood; but it is just the recognition of this fact that for my reflective consciousness inclines the balance. It is in the rôle of passive observer that evils overweigh me most, whereas the times when I am least uncertain that man may hope for a satisfying life in a world that is not unfriendly to him are the times when my instincts are in active eruption; and if I ask myself which mood carries with it the greater impression of reality I do not have to hesitate about the answer. I may on occasion be minded to discard ideals and resign myself to salvaging such personal benefits as come my way, among which a sardonic interest in the spectacle of human folly will perhaps not prove the least enduring. But I do not find it in my heart particularly to like or to admire such a temper. It is the man who, without shutting his eyes to unpleasant facts, still trusts

his instincts and goes ahead to make them count who calls forth my spontaneous applause. And to free this last attitude from the suggestion either of sentimental bravado or of unintelligence, I need to contemplate it, not as a forlorn hope inspired by the courage of despair, but as the outgrowth of a confidence that the goal it sees to be desirable the world is so framed as to put within our reach. This, as I say, is less a reasoned conclusion than an intuition. But it will have a certain rational grounding also in so far as experience makes plausible the claim that *all* our human assurances rest in the end on just such an ultimate and unreasoned prompting of human nature. And at least metaphysics has left me with the firm persuasion—perhaps its most substantial service—that whether or not my own favourite arguments are sound, there is no logical compulsion in rival speculations to force me to abandon them.

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BRIEF HISTORY OF MY OPINIONS

By GEORGE SANTAYANA

Born 1863; formerly Professor of Philosophy, Harvard University, Cambridge, Mass.

BRIEF HISTORY OF MY OPINIONS

How came a child born in Spain of Spanish parents to be educated in Boston and to write in the English language? The case of my family was unusual. We were not emigrants; none of us ever changed his country, his class, or his religion. But special circumstances had given us hereditary points of attachment in opposite quarters, moral and geographical; and now that we are almost extinct—I mean those of us who had these mixed associations—I may say that we proved remarkably staunch in our complex allegiances, combining them as well as logic allowed, without at heart ever disowning anything. My philosophy in particular may be regarded as a synthesis of these various traditions, or as an attempt to view them from a level from which their several deliverances may be justly understood. I do not assert that such was actually the origin of my system: in any case its truth would be another question. I propose simply to describe as best I can the influences under which I have lived, and leave it for the reader, if he cares, to consider how far my philosophy may be an expression of them.

In the first place, we must go much farther afield than Boston or Spain, into the tropics, almost to the antipodes. Both my father and my mother's father were officials in the Spanish civil service in the Philippine Islands. This was in the 1840's and 1850's, long before my birth; for my parents were not married until later in life, in Spain, when my mother was a widow. But the tradition of the many years which each of them separately had spent in the East was always alive in our household. Those had been, for both, their more romantic and prosperous days. My father had studied the country and the natives, and had written a little book about the Island of Mindanao; he had been three times round the world in the sailing-ships of the period, and had incidentally visited England and the United States, and been immensely impressed by the energy and order prevalent in those nations. His respect for material greatness was profound, yet not unmixed with a secret irony or even repulsion. He had a seasoned and incredulous mind, trained to see other sorts of excellence

also: in his boyhood he had worked in the studio of a professional painter of the school of Goya, and had translated the tragedies of Seneca into Spanish verse. His transmarine experiences, therefore, did not rattle, as so often happens, in an empty head. The sea itself, in those days, was still vast and blue, and the lands beyond it full of lessons and wonders. From childhood I have lived in the imaginative presence of interminable ocean spaces, coconut islands, blameless Malays, and immense continents swarming with Chinamen, polished and industrious, obscene and philosophical. It was habitual with me to think of scenes and customs pleasanter than those about me. My own travels have never carried me far from the frontiers of Christendom or of respectability, and chiefly back and forth across the North Atlantic—thirty-eight fussy voyages; but in mind I have always seen these things on an ironical background enormously empty, or breaking out in spots, like Polynesia, into nests of innocent particoloured humanity.

My mother's figure belonged to the same broad and somewhat exotic landscape; she had spent her youth in the same places; but the moral note resounding in her was somewhat different. Her father, José Borrás, of Reus in Catalonia, had been a disciple of Rousseau, an enthusiast and a wanderer: he taught her to revere pure reason and republican virtue and to abhor the vices of a corrupt world. But her own temper was cool and stoical, rather than ardent, and her disdain of corruption had in it a touch of elegance. At Manila, during the time of her first marriage, she had been rather the grand lady, in a style half Creole, half early Victorian. Virtue, beside those tropical seas, might stoop to be indolent. She had given a silver dollar every morning to her native major-domo, with which to provide for the family and the twelve servants, and keep the change for his wages. Meantime she bathed, arranged the flowers, received visits, and did embroidery. It had been a spacious life; and in our narrower circumstances in later years the sense of it never forsook her.

Her first husband, an American merchant established in Manila, had been the sixth son of Nathaniel Russell Sturgis, of Boston (1779–1856). In Boston, accordingly, her three Sturgis

children had numerous relations and a little property, and there she had promised their father to bring them up in case of his death. When this occurred, in 1857, she therefore established herself in Boston; and this fact, by a sort of pre-natal or pre-established destiny, was the cause of my connection with the Sturgis family, with Boston, and with America.

It was in Madrid in 1862, where my mother had gone on a visit intended to be temporary, that my father and she were married. He had been an old friend of hers and of her first husband's, and was well aware of her settled plan to educate her children in America, and recognized the propriety of that arrangement. Various projects and combinations were mooted: but the matter eventually ended in a separation, friendly, if not altogether pleasant to either party. My mother returned with her Sturgis children to live in the United States and my father and I remained in Spain. Soon, however, this compromise proved unsatisfactory. The education and prospects which my father, in his modest retirement, could offer me in Spain were far from brilliant; and in 1872 he decided to take me to Boston, where, after remaining for one cold winter, he left me in my mother's care and went back to Spain.

I was then in my ninth year, having been born on December 16, 1863, and I did not know one word of English. Nor was I likely to learn the language at home, where the family always continued to speak a Spanish more or less pure. But by a happy thought I was sent during my first winter in Boston to a Kindergarten, among much younger children, where there were no books, so that I picked up English by ear before knowing how it was written: a circumstance to which I probably owe speaking the language without a marked foreign accent. The Brimmer School, the Boston Latin School, and Harvard College then followed in order: but apart from the taste for English poetry which I first imbibed from our excellent English master, Mr. Byron Groce, the most decisive influences over my mind in boyhood continued to come from my family, where, with my grown-up brother and sisters, I was the only child. I played no games, but sat at home all the afternoon and evening reading or drawing; especially

devouring anything I could find that regarded religion, architecture, or geography.

In the summer of 1883, after my Freshman year, I returned for the first time to Spain to see my father. Then, and during many subsequent holidays which I spent in his company, we naturally discussed the various careers that might be open to me. We should both of us have liked the Spanish army or diplomatic service: but for the first I was already too old, and our means and our social relations hardly sufficed for the second. Moreover, by that time I felt like a foreigner in Spain, more acutely so than in America, although for more trivial reasons: my Yankee manners seemed outlandish there, and I could not do myself justice in the language. Nor was I inclined to overcome this handicap, as perhaps I might have done with a little effort: nothing in Spanish life or literature at that time particularly attracted me. English had become my only possible instrument, and I deliberately put away everything that might confuse me in that medium. English, and the whole Anglo-Saxon tradition in literature and philosophy, have always been a medium to me rather than a source. My natural affinities were elsewhere. Moreover, scholarship and learning of any sort seemed to me a means, not an end. I always hated to be a professor. Latin and Greek, French, Italian, and German, although I can read them, were languages which I never learned well. It seemed an accident to me if the matters which interested me came clothed in the rhetoric of one or another of these nations: I was not without a certain temperamental rhetoric of my own in which to recast what I adopted. Thus in renouncing every thing else for the sake of English letters I might be said to have been guilty, quite unintentionally, of a little stratagem, as if I had set out to say plausibly in English as many un-English things as possible.

This brings me to religion, which is the head and front of everything. Like my parents, I have always set myself down officially as a Catholic: but this is a matter of sympathy and traditional allegiance, not of philosophy. In my adolescence, religion on its doctrinal and emotional side occupied me much more than it does now. I was more unhappy and unsettled; but I have never

had any unquestioning faith in any dogma, and have never been what is called a practising Catholic. Indeed, it would hardly have been possible. My mother, like her father before her, was a Deist: she was sure there was a God, for who else could have made the world? But God was too great to take special thought for man: sacrifices, prayers, churches, and tales of immortality were invented by rascally priests in order to dominate the foolish. My father, except for the Deism, was emphatically of the same opinion. Thus, although I learned my prayers and catechism by rote, as was then inevitable in Spain, I knew that my parents regarded all religion as a work of human imagination: and I agreed, and still agree, with them there. But this carried an implication in their minds against which every instinct in me rebelled, namely that the works of human imagination are bad. No, said I to myself even as a boy: they are good, they alone are good; and the rest—the whole real world—is ashes in the mouth. My sympathies were entirely with those other members of my family who were devout believers. I loved the Christian epic, and all those doctrines and observances which bring it down into daily life: I thought how glorious it would have been to be a Dominican friar, preaching that epic eloquently, and solving afresh all the knottiest and sublimest mysteries of theology. I was delighted with anything, like Mallock's *Is Life Worth Living?*, which seemed to rebuke the fatuity of that age. For my own part, I was quite sure that life was not worth living; for if religion was false everything was worthless, and almost everything, if religion was true. In this youthful pessimism I was hardly more foolish than so many amateur mediævalists and religious æsthetes of my generation. I saw the same alternative between Catholicism and complete disillusion: but I was never afraid of disillusion, and I have chosen it.

Since those early years my feelings on this subject have become less strident. Does not modern philosophy teach that our idea of the so-called real world is also a work of imagination? A religion—for there are other religions than the Christian—simply offers a system of faith different from the vulgar one, or extending beyond it. The question is which imaginative system you will

trust. My matured conclusion has been that no system is to be trusted, not even that of science in any literal or pictorial sense; but all systems may be used and, up to a certain point, trusted as symbols. Science expresses in human terms our dynamic relation to surrounding reality. Philosophies and religions, where they do not misrepresent these same dynamic relations and do not contradict science, express destiny in moral dimensions, in obviously mythical and poetical images: but how else should these moral truths be expressed at all in a traditional or popular fashion? Religions are the great fairy-tales of the conscience.

When I began the formal study of philosophy as an undergraduate at Harvard, I was already alive to the fundamental questions, and even had a certain dialectical nimbleness, due to familiarity with the fine points of theology: the arguments for and against free will and the proofs of the existence of God were warm and clear in my mind. I accordingly heard James and Royce with more wonder than serious agreement: my scholastic logic would have wished to reduce James at once to a materialist and Royce to a solipsist, and it seemed strangely irrational in them to resist such simplification. I had heard many Unitarian sermons (being taken to hear them lest I should become too Catholic), and had been interested in them so far as they were rationalistic and informative, or even amusingly irreligious, as I often thought them to be: but neither in those discourses nor in Harvard philosophy was it easy for me to understand the Protestant combination of earnestness with waywardness. I was used to see water flowing from fountains, architectural and above ground: it puzzled me to see it drawn painfully in bucketfuls from the subjective well, muddied, and half spilt over.

There was one lesson, however, which I was readier to learn, not only at Harvard from Professor Palmer and afterwards at Berlin from Paulsen, but from the general temper of that age well represented for me by the *Revue Des Deux Mondes* (which I habitually read from cover to cover) and by the works of Taine and of Matthew Arnold—I refer to the historical spirit of the nineteenth century, and to that splendid panorama of nations and religions, literatures and arts, which it unrolled before the

imagination. These picturesque vistas into the past came to fill in circumstantially that geographical and moral vastness to which my imagination was already accustomed. Professor Palmer was especially skilful in bending the mind to a suave and sympathetic participation in the views of all philosophers in turn: were they not all great men, and must not the aspects of things which seemed persuasive to them be really persuasive? Yet even this form of romanticism, amiable as it is, could not altogether put to sleep my scholastic dogmatism. The historian of philosophy may be as sympathetic and as self-effacing as he likes: the philosopher in him must still ask whether any of those successive views were true, or whether the later ones were necessarily truer than the earlier: he cannot, unless he is a shameless sophist, rest content with a truth *pro tem.* In reality the sympathetic reconstruction of history is a literary art, and it depends for its plausibility as well as for its materials on a conventional belief in the natural world. Without this belief no history and no science would be anything but a poetic fiction, like a classification of the angelic choirs. The necessity of naturalism as a foundation for all further serious opinions was clear to me from the beginning. Naturalism might indeed be criticized—and I was myself intellectually and emotionally predisposed to criticize it, and to oscillate between supernaturalism and solipsism—but if naturalism was condemned, supernaturalism itself could have no point of application in the world of fact; and the whole edifice of human knowledge would crumble, since no perception would then be a report and no judgment would have a transcendent object. Hence historical reconstruction seemed to me more honestly and solidly practised by Taine, who was a professed naturalist, than by Hegel and his school, whose naturalism, though presupposed at every stage, was disguised and distorted by a dialectic imposed on it by the historian and useful at best only in simplifying his dramatic perspectives and lending them a false absoluteness and moralistic veneer.

The influence of Royce over me, though less important in the end than that of James, was at first much more active. Royce was the better dialectician, and traversed subjects in which I

was naturally more interested. The point that particularly exercised me was Royce's Theodicy or justification for the existence of evil. It would be hard to exaggerate the ire which his arguments on this subject aroused in my youthful breast. Why that emotion? Romantic sentiment that could find happiness only in tears and virtue only in heroic agonies was something familiar to me and not unsympathetic: a poetic play of mine, called *Lucifer*, conceived in those days, is a clear proof of it. I knew Leopardi and Musset largely by heart; Schopenhauer was soon to become, for a brief period, one of my favourite authors. I carried Lucretius in my pocket: and although the spirit of the poet in that case was not romantic, the picture of human existence which he drew glorified the same vanity. Spinoza, too, whom I was reading under Royce himself, filled me with joy and enthusiasm: I gathered at once from him a doctrine which has remained axiomatic with me ever since, namely that good and evil are relative to the natures of animals, irreversible in that relation, but indifferent to the march of cosmic events, since the force of the universe infinitely exceeds the force of any one of its parts. Had I found, then, in Royce only a romantic view of life, or only pessimism, or only stoical courage and pantheistic piety, I should have taken no offence, but readily recognized the poetic truth or the moral legitimacy of those positions. Conformity with fate, as I afterwards came to see, belongs to post-rational morality, which is a normal though optional development of human sentiment: Spinoza's "intellectual love of God" was a shining instance of it.

But in Royce these attitudes, in themselves so honest and noble, seemed to be somehow embroiled and rendered sophistical: nor was he alone in this, for the same moral equivocation seemed to pervade Hegel, Browning, and Nietzsche. That which repelled me in all these men was the survival of a sort of forced optimism and pulpit unction, by which a cruel and nasty world, painted by them in the most lurid colours, was nevertheless set up as the model and standard of what ought to be. The duty of an honest moralist would have been rather to distinguish, in this bad or mixed reality, the part, however small, that could be loved and

chosen from the remainder, however large, which was to be rejected and renounced. Certainly the universe was in flux and dynamically single: but this fatal flux could very well take care of itself; and it was not so fluid that no islands of a relative permanence and beauty might not be formed in it. Ascetic conformity was itself one of these islands: a scarcely inhabitable peak from which almost all human passions and activities were excluded. And the Greeks, whose deliberate ethics was rational, never denied the vague early Gods and the environing chaos, which perhaps would return in the end: but meantime they built their cities bravely on the hill-tops, as we all carry on pleasantly our temporal affairs, although we know that to-morrow we die. Life itself exists only by a modicum of organization, achieved and transmitted through a world of change: the momentum of such organization first creates a difference between good and evil, or gives them a meaning at all. Thus the core of life is always hereditary, steadfast, and classical; the margin of barbarism and blind adventure round it may be as wide as you will, and in some wild hearts the love of this fluid margin may be keen, as might be any other loose passion. But to *preach* barbarism as the only good, in ignorance or hatred of the possible perfection of every natural thing, was a scandal: a belated Calvinism that remained fanatical after ceasing to be Christian. And there was a further circumstance which made this attitude particularly odious to me. This romantic love of evil was not thoroughgoing: wilfulness and disorder were to reign only in spiritual matters; in government and industry, even in natural science, all was to be order and mechanical progress. Thus the absence of a positive religion and of a legislation, like that of the ancients, intended to be rational and final, was very far from liberating the spirit for higher flights: on the contrary, it opened the door to the pervasive tyranny of the world over the soul. And no wonder: a soul rebellious to its moral heritage is too weak to reach any firm definition of its inner life. It will feel lost and empty unless it summons the random labours of the contemporary world to fill and to enslave it. It must let mechanical and civic achievements reconcile it to its own moral confusion and triviality.

It was in this state of mind that I went to Germany to continue the study of philosophy—interested in all religious or metaphysical systems, but sceptical about them and scornful of any romantic worship or idealization of the real world. The life of a wandering student, like those of the Middle Ages, had an immense natural attraction for me—so great, that I have never willingly led any other. When I had to choose a profession, the prospect of a quiet academic existence seemed the least of evils. I was fond of reading and observation, and I liked young men; but I have never been a diligent student either of science or art, nor at all ambitious to be learned. I have been willing to let cosmological problems and technical questions solve themselves as they would or as the authorities agreed for the moment that they should be solved. My pleasure was rather in expression, in reflection, in irony: my spirit was content to intervene, in whatever world it might seem to find itself, in order to disentangle the intimate moral and intellectual echoes audible to it in that world. My naturalism or materialism is no academic opinion: it is not a survival of the alleged materialism of the nineteenth century, when all the professors of philosophy were idealists: it is an everyday conviction which came to me, as it came to my father, from experience and observation of the world at large, and especially of my own feelings and passions. It seems to me that those who are not materialists cannot be good observers of themselves: they may hear themselves thinking, but they cannot have watched themselves acting and feeling; for feeling and action are evidently accidents of matter. If a Democritus or Lucretius or Spinoza or Darwin works within the lines of nature, and clarifies some part of that familiar object, that fact is the ground of my attachment to them: they have the savour of truth; but what the savour of truth is, I know very well without their help. Consequently there is no opposition in my mind between materialism and a Platonic or even Indian discipline of the spirit. The recognition of the material world and of the conditions of existence in it merely enlightens the spirit concerning the source of its troubles and the means to its happiness or deliverance: and it was happiness or deliverance, the supervening supreme expression of human will and imagination,

that alone really concerned me. This alone was genuine philosophy: this alone was the life of reason.

Had the life of reason ever been cultivated in the world by people with a sane imagination? Yes, once, by the Greeks. Of the Greeks, however, I knew very little: the philosophical and political departments at Harvard had not yet discovered Plato and Aristotle. It was with the greater pleasure that I heard Paulsen in Berlin expounding Greek ethics with a sweet reasonableness altogether worthy of the subject: here at last was a vindication of order and beauty in the institutions of men and in their ideas. Here, through the pleasant medium of transparent myths or of summary scientific images, like the water of Thales, nature was essentially understood and honestly described; and here, for that very reason, the free mind could disentangle its true good, and could express it in art, in manners, and even in the most refined or the most austere spiritual discipline. Yet, although I knew henceforth that in the Greeks I should find the natural support and point of attachment for my own philosophy, I was not then collected or mature enough to pursue the matter; not until ten years later, in 1896–1897, did I take the opportunity of a year's leave of absence to go to England and begin a systematic reading of Plato and Aristotle under Dr. Henry Jackson of Trinity College, Cambridge. I am not conscious of any change of opinion supervening, nor of any having occurred earlier; but by that study and change of scene my mind was greatly enriched; and the composition of *The Life of Reason* was the consequence.

This book was intended to be a summary history of the human imagination, expressly distinguishing those phases of it which showed what Herbert Spencer called an adjustment of inner to outer relations; in other words, an adaptation of fancy and habit to material facts and opportunities. On the one hand, then, my subject being the imagination, I was never called on to step beyond the subjective sphere. I set out to describe, not nature or God, but the ideas of God or nature bred in the human mind. On the other hand, I was not concerned with these ideas for their own sake, as in a work of pure poetry or erudition, but I meant to consider them in their natural genesis and significance; for I

assumed throughout that the whole life of reason was generated and controlled by the animal life of man in the bosom of nature. Human ideas had, accordingly, a symptomatic, expressive, and symbolic value: they were the inner notes sounded by man's passions and by his arts: and they became rational partly by their vital and inward harmony—for reason is a harmony of the passions —and partly by their adjustment to external facts and possibilities —for reason is a harmony of the inner life with truth and with fate. I was accordingly concerned to discover what wisdom is possible to an animal whose mind, from beginning to end, is poetical: and I found that this could not lie in discarding poetry in favour of a science supposed to be clairvoyant and literally true. Wisdom lay rather in taking everything good-humouredly, with a grain of salt. In science there was an element of poetry, pervasive, inevitable, and variable: it was strictly scientific and true only in so far as it involved a close and prosperous adjustment to the surrounding world, at first by its origin in observation and at last by its application in action. Science was the mental accompaniment of art.

Here was a sort of pragmatism: the same which I have again expressed, I hope more clearly, in one of the *Dialogues in Limbo* entitled "Normal Madness." The human mind is a faculty of dreaming awake, and its dreams are kept relevant to its environment and to its fate only by the external control exercised over them by Punishment, when the accompanying conduct brings ruin, or by Agreement, when it brings prosperity. In the latter case it is possible to establish correspondences between one part of a dream and another, or between the dreams of separate minds, and so create the world of literature, or the life of reason. I am not sure whether this notion, that thought is a controlled and consistent madness, appears among the thirteen pragmatisms which have been distinguished, but I have reason to think that I came to it under the influence of William James; nevertheless, when his book on *Pragmatism* appeared, about the same time as my *Life of Reason*, it gave me a rude shock. I could not stomach that way of speaking about truth; and the continual substitution of human psychology—normal madness, in my view

—for the universe, in which man is but one distracted and befuddled animal, seemed to me a confused remnant of idealism, and not serious.

The William James who had been my master was not this William James of the later years, whose pragmatism and pure empiricism and romantic metaphysics have made such a stir in the world. It was rather the puzzled but brilliant doctor, impatient of metaphysics, whom I had known in my undergraduate days, one of whose maxims was that to study the abnormal was the best way of understanding the normal; or it was the genial author of *The Principles of Psychology*, chapters of which he read from the manuscript and discussed with a small class of us in 1889. Even then what I learned from him was perhaps chiefly things which explicitly he never taught, but which I imbibed from the spirit and background of his teaching. Chief of these, I should say, was a sense for the immediate: for the unadulterated, unexplained, instant fact of experience. Actual experience, for William James, however varied or rich its assault might be, was always and altogether of the nature of a sensation: it possessed a vital, leaping, globular unity which made the only fact, the flying fact, of our being. Whatever continuities of quality might be traced in it, its existence was always momentary and self-warranted. A man's life or soul borrowed its reality and imputed wholeness from the intrinsic actuality of its successive parts; existence was a perpetual re-birth, a travelling light to which the past was lost and the future uncertain. The element of indetermination which James felt so strongly in this flood of existence was precisely the pulse of fresh unpredictable sensation, summoning attention hither and thither to unexpected facts. Apprehension in him being impressionistic—that was the age of impressionism in painting too—and marvellously free from intellectual assumptions or presumptions, he felt intensely the fact of contingency, or the contingency of fact. This seemed to me not merely a peculiarity of temperament in him, but a profound insight into existence, in its inmost irrational essence. Existence, I learned to see, is intrinsically dispersed, seated in its distributed moments, and arbitrary not only as a whole, but in the character

and place of each of its parts. Change the bits, and you change the mosaic: nor can we count or limit the elements, as in a little closed kaleidoscope, which may be shaken together into the next picture. Many of them, such as pleasure and pain, or the total picture itself, cannot possibly have pre-existed.

But, said I to myself, were these novelties for that reason unconditioned? Was not sensation, by continually surprising us, a continual warning to us of fatal conjunctions occurring outside? And would not the same conjunctions, but for memory and habit, always produce the same surprises? Experience of indetermination was no proof of indeterminism; and when James proceeded to turn immediate experience into ultimate physics, his thought seemed to me to lose itself in words or in confused superstitions. Free will, a deep moral power contrary to a romantic indetermination in being, he endeavoured to pack into the bias of attention—the most temperamental of accidents. He insisted passionately on the efficacy of consciousness, and invoked Darwinian arguments for its utility—arguments which assumed that consciousness was a material engine absorbing and transmitting energy: so that it was no wonder that presently he doubted whether consciousness existed at all. He suggested a new physics or metaphysics in which the essences given in immediate experience should be deployed and hypostatized into the constituents of nature: but this pictorial cosmology had the disadvantage of abolishing the human imagination, with all the pathos and poetry of its animal status. James thus renounced that gift for literary psychology, that romantic insight, in which alone he excelled; and indeed his followers are without it. I pride myself on remaining a disciple of his earlier unsophisticated self, when he was an agnostic about the universe, but in his diagnosis of the heart an impulsive poet: a master in the art of recording or divining the lyric quality of experience as it actually came to him or to me.

Lyric experience and literary psychology, as I have learned to conceive them, are chapters in the life of one race of animals, in one corner of the natural world. But before relegating them to that modest station (which takes nothing away from their

spiritual prerogatives) I was compelled to face the terrible problem which arises when, as in modern philosophy, literary psychology and lyric experience are made the fulcrum or the stuff of the universe. Has this experience any external conditions? If it has, are they knowable? And if it has not, on what principle are its qualities generated or its episodes distributed? Nay, how can literary psychology or universal experience have any seat save the present fancy of the psychologist or the historian? Although James had been bothered and confused by these questions, and Royce had enthroned his philosophy upon them, neither of these my principal teachers seemed to have come to clearness on the subject: it was only afterwards, when I read Fichte and Schopenhauer, that I began to see my way to a solution. We must oscillate between a radical transcendentalism, frankly reduced to a solipsism of the living moment, and a materialism posited as a presupposition of conventional sanity. There was no contradiction in joining together a scepticism which was not a dogmatic negation of anything and an animal faith which avowedly was a mere assumption in action and description. Yet such oscillation, if it was to be justified and rendered coherent, still demanded some understanding of two further points: what, starting from immediate experience, was the *causa cognoscendi* of the natural world; and what, starting from the natural world, was the *causa fiendi* of immediate experience?

On this second point (in spite of the speculations of my friend Strong) I have not seen much new light. I am constrained merely to register as a brute fact the emergence of consciousness in animal bodies. A psyche, or nucleus of hereditary organization, gathers and governs these bodies, and at the same time breeds within them a dreaming, suffering, and watching mind. Such investigations as those of Fraser and of Freud have shown how rich and how mad a thing the mind is fundamentally, how pervasively it plays about animal life, and how remote its first and deepest intuitions are from any understanding of their true occasions. An interesting and consistent complement to these discoveries is furnished by behaviourism, which I heartily accept on its positive biological side: the hereditary life of the body,

modified by accident or training, forms a closed cycle of habits and actions. Of this the mind is a concomitant spiritual expression, invisible, imponderable, and epiphenomenal, or, as I prefer to say, hypostatic: for in it the moving unities and tensions of animal life are synthesized on quite another plane of being, into actual intuitions and feelings. This spiritual fertility in living bodies is the most natural of things. It is unintelligible only as all existence, change, or genesis is unintelligible; but it might be better understood, that is, better assimilated to other natural miracles, if we understood better the life of matter everywhere, and that of its different aggregates.

On the other point raised by my naturalism, namely on the grounds of faith in the natural world, I have reached more positive conclusions. Criticism, I think, must first be invited to do its worst: nothing is more dangerous here than timidity or convention. A pure and radical transcendentalism will disclaim all knowledge of fact. Nature, history, the self become ghostly presences, mere notions of such things; and the being of these images becomes purely internal to them; they exist in no environing space or time; they possess no substance or hidden parts, but are all surface, all appearance. Such a being, or quality of being, I call an essence; and to the consideration of essences, composing of themselves an eternal and infinite realm, I have lately devoted much attention. To that sphere I transpose the familiar pictures painted by the senses, or by traditional science and religion. Taken as essences, all ideas are compatible and supplementary to one another, like the various arts of expression; it is possible to perceive, up to a certain point, the symbolic burden of each of them, and to profit by the spiritual criticism of experience which it may embody. In particular, I recognize this spiritual truth in the Neo-Platonic and Indian systems, without admitting their fabulous side: after all, it is an old maxim with me that many ideas may be convergent as poetry which would be divergent as dogmas. This applies, in quite another quarter, to that revolution in physics which is now loudly announced, sometimes as the bankruptcy of science, sometimes as the breakdown of materialism. This revolution becomes, in my view, simply a change in notation.

Matter may be called gravity or an electric charge or a tension in an ether; mathematics may readjust its equations to more accurate observations; any fresh description of nature which may result will still be a product of human wit, like the Ptolemaic and the Newtonian systems, and nothing but an intellectual symbol for man's contacts with matter, in so far as they have gone or as he has become distinctly sensitive to them. The real matter, within him and without, will meantime continue to rejoice in its ancient ways, or to adopt new ones, and incidentally to create these successive notions of it in his head.

When all the data of immediate experience and all the constructions of thought have thus been purified and reduced to what they are intrinsically, that is, to eternal essences, by a sort of counterblast the sense of existence, of action, of ambushed reality everywhere about us, becomes all the clearer and more imperious. This assurance of the not-given is involved in action, in expectation, in fear, hope, or want: I call it animal faith. The object of this faith is the substantial energetic thing encountered in action, whatever this thing may be in itself; by moving, devouring, or transforming this thing I assure myself of its existence; and at the same time my respect for it becomes enlightened and proportionate to its definite powers. But throughout, for the description of it in fancy, I have only the essences which my senses or thought may evoke in its presence; these are my inevitable signs and names for that object. Thus the whole sensuous and intellectual furniture of the mind becomes a store whence I may fetch terms for the description of nature, and may compose the silly home-poetry in which I talk to myself about everything. All is a tale told, if not by an idiot, at least by a dreamer; but it is far from signifying nothing. Sensations are rapid dreams: perceptions are dreams sustained and developed at will; sciences are dreams abstracted, controlled, measured, and rendered scrupulously proportional to their occasions. Knowledge accordingly always remains a part of imagination in its terms and in its seat; yet by virtue of its origin and intent it becomes a memorial and a guide to the fortunes of man in nature.

In the foregoing I have said nothing about my sentiments

concerning æsthetics or the fine arts; yet I have devoted two volumes to those subjects, and I believe that to some people my whole philosophy seems to be little but rhetoric or prose poetry. I must frankly confess that I have written some verses; and at one time I had thoughts of becoming an architect or even a painter. The decorative and poetic aspects of art and nature have always fascinated me and held my attention above everything else. But in philosophy I recognize no separable thing called æsthetics; and what has gone by the name of the philosophy of art, like the so-called philosophy of history, seems to me sheer verbiage. There is in art nothing but manual knack and professional tradition on the practical side, and on the contemplative side pure intuition of essence, with the inevitable intellectual or luxurious pleasure which pure intuition involves. I can draw no distinction—save for academic programmes—between moral and æsthetic values: beauty, being a good, is a moral good; and the practice and enjoyment of art, like all practice and all enjoyment, fall within the sphere of morals—at least if by morals we understand moral economy and not moral superstition. On the other hand, the good, when actually realized and not merely pursued from afar, is a joy in the immediate; it is possessed with wonder and is in that sense æsthetic. Such pure joy when blind is called pleasure, when centred in some sensible image is called beauty, and when diffused over the thought of ulterior propitious things is called happiness, love, or religious rapture. But where all is manifest, as it is in intuition, classifications are pedantic. Harmony, which might be called an æsthetic principle, is also the principle of health, of justice, and of happiness. Every impulse, not the æsthetic mood alone, is innocent and irresponsible in its origin and precious in its own eyes; but every impulse or indulgence, including the æsthetic, is evil in its effect, when it renders harmony impossible in the general tenor of life, or produces in the soul division and ruin. There is no lack of folly in the arts; they are full of inertia and affectation and of what must seem ugliness to a cultivated taste; yet there is no need of bringing the catapult of criticism against it: indifference is enough. A society will breed the art which it is capable of, and which it deserves; but even in its own eyes this art will hardly be important or beautiful unless it engages deeply the resources of the soul. The arts may die of triviality, as they were born of enthusiasm. On the other hand, there will always be beauty, or a transport akin to the sense of beauty, in any high contemplative moment. And it is only in contemplative moments that life is truly vital, when routine gives place to intuition, and experience is synthesized and brought before the spirit in its sweep and truth. The intention of my philosophy has certainly been to attain, if possible, such wide intuitions, and to celebrate the emotions with which they fill the mind. If this object be æsthetic and merely poetical, well and good: but it is a poetry or æstheticism which shines by disillusion and is simply intent on the unvarnished truth.

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REALISM, NATURALISM, AND HUMANISM

By ROY WOOD SELLARS

Born 1880; University of Michigan, Ann Arbor.

REALISM, NATURALISM, AND HUMANISM

I

Biographical

I have been given to understand that the essays included in this volume are supposed to present an exposition of the writer's philosophical creed—if he has a definite one—and, at the same time, to indicate some of the influences which have affected his thought. There is, I presume, no assumption that his thought is a mere effect of these influences, but rather the quite justified belief that it can be better understood in relation to them.

Because it will be easiest to consider first the influences which I can note in my life I shall begin in this way and so preface the systematic part of my essay with some remarks upon the development of my thought.

I was brought up in a small village in an almost pioneer community in north-eastern Michigan. Actually I was born in Canada of typically mixed stock, in which I can trace Scot, English, Welsh, Irish, and German ingredients, the Scot predominating. My father, who was a physician, was a man whom I have always regarded as of exceptional natural ability. He had struggled for an education, becoming a country school teacher in Canada at an early age, in a period when schools were attended by pretty rough boys and girls often older than the teacher. His stories of his life undoubtedly influenced my attitude to many things. Forced to give up school work by bad health after he had made a success, he attended the University of Michigan while a small family, myself the youngest, was dependent upon him. Economic pressure then forced him to find a place where practice would quickly come, and the new country of the North was chosen.

It was here that my formative years were spent, for I did not leave the little village until I was seventeen. Here my companions were farmers' boys, and my chief pleasure was reading what books I could lay my hands on and roaming through the woods. It was a simple life in its way, but one that would lead a sensitive

and self-conscious boy to much introspection and meditation. Of philosophy I knew little as yet except the name, though I read Carlyle and Emerson assiduously. My father was almost a zealot in his insistence upon education, and I owe him much for his stimulation of my interest in history and science. His library was literally the only one in the whole neighbourhood, and consisted largely of the books dating from his days as a schoolmaster. As I grew older, we used to talk together in his office about medicine. It is an interesting coincidence that I, who have stood in this country for naturalism, realism, and humanism in a rather aggressive fashion, should have been brought up in this atmosphere. I recall this small point of agreement with Aristotle with pride.

I arrived at the University of Michigan at the age of nineteen, an undoubtedly queer freshman, with a large amount of self-education mingled with my schooling. In the sophomore year I started my work in philosophy. Here I came under the influence of Wenley, Lloyd, and Rebec. While I afterwards struck out on a path of my own, which they never entirely approved, I can see how they gave me perspective and awakened me intellectually. It was my contact with a fuller and deeper culture. Another teacher who affected me in many ways was Craig, who was head of the Semitics department. I have always regretted that the mathematics department had no outstanding men at the time. There was no vision in it. I laboured on to calculus and then stopped.

A year spent as Fellow at the University of Wisconsin brought me into contact with Sharp and Bode. This was in 1904. It was Sharp who called my attention to G. E. Moore's essay in *Mind*, entitled "A Refutation of Idealism." I frequently talked entire evenings with Bode, who was just then swinging to pragmatism. Called to Michigan the next year as an instructor, I devoted myself to teaching and to securing my doctorate. With the exception of two periods spent abroad, chiefly in France and Germany, my life has been passed in the little city of Ann Arbor, in the usual academic fashion.

A philosopher's thought is roughly distinguishable into his

technical investigation and the larger background of reflection and experience which makes up his life. These, of course, interact, but they are not exactly identical. It is the larger play of reflection and experience that constitutes the individual's intellectual and emotional adjustment to the world, his growing imaginative insight into the texture of reality. His technical analysis of traditional problems is an affair of detail, and it seems to me to proceed step by step with the growth of his outlook upon things.

Now I can plainly see that my general outlook has been dominated by the *set* of my own personality, which is strongly self-conscious and individualistic. I note that I have always rejected any theory which did not do justice to the uniqueness of each centre of consciousness, to doctrines of fusion and mysticism. I mean by this that I always held to mental pluralism while recognizing that the individual is part of a larger world which plays upon him. Thus, while in sympathy with the general fight of pragmatism against absolute idealism, I could never accept the tendency of the Chicago School to a social consciousness.

I began to work out my own view of things in connection with a course which I gave on the fundamental concepts of science. Here it was my method to start with natural realism and advance step by step to what I called scientific realism. Readers of my first book, *Critical Realism*, published in 1916, though sent to the publishing house in 1913, will recognize this method. I still regard it as the proper approach to theory of knowledge.

Accompanying this interest in science was a revolt against traditional religion and an increasing interest in human beings and in social movements. I discarded supernaturalism completely and decided that the heart of religion lay in the effort of man to safeguard what he conceived as valuable. Religion, I felt, was a reflection of man's strategy in the face of the world as he understood it. And this understanding varied. What, I asked myself, would happen to religion as the belief in supernatural agencies and controls gave way to naturalism. It seemed to me

that religion would be transformed and become a philosophy of life dominated by a frank realization of man's place in nature and a keen sense for what was worth while in life. In the little book, *The Next Step in Religion*, I called this transformed religion humanism, a loyalty to human values. When I undertook to publish it, I was told by many that I was foolish, that such a frank suggestion of naturalism would get me into trouble, slow up my promotion, prevent my being called elsewhere. Perhaps it has had some of these effects, but there is compensation in freedom of self-expression. Besides, what was pioneer work ten years ago is almost commonplace already, so quickly does thought move in the United States. I do not think that foreigners sufficiently realize what opposing tendencies are at work here. Philosophy and psychology have been lifting themselves out of traditional perspectives more rapidly in America than elsewhere.

In social matters my development was analogous. I saw an unawareness of social problems and maladjustments, a constant whipping-up of the acquisitive instincts. Of course, this was not all that I saw, for there are many admirable sides to American life. Any criticism I had to pass was, I felt, applicable to modern civilization as a whole. Had the industrial revolution and modern finance concentrated power and nourished false ideals? Could we have faith in the coming of automatic readjustments? Or was it time for social planning and criticism? Becoming acquainted with the literature of social reform, I inevitably came into contact with the world-wide socialist movement. I tried to see what was valuable and what was outworn in Marxianism. The result was my *The Next Step in Democracy*, which fell into line with much of the English writing on the subject. It stressed the value of social experimentation in co-operation, profit-sharing, limitation of inheritance, and increased participation of employees. It is my desire to come back again to this field before long and do really systematic work in it.

These general remarks in regard to my intellectual development show that I was a child of the twentieth century, forward-looking and not too much impressed by intellectual and social traditions. I believed that man was slowly gaining insight into himself, into

the texture of society, and into the general structure of the universe. My thought has thus been intertwined with the discoveries, generalizations, and valuations of the period. And yet I was never a mere child of the present. The history of philosophy brought to me the life of distant cultures and other times. Thus my knowledge of Greek thought confirmed me in my humanism and naturalism. It seemed to me that, in its brief period of splendour and success, Greece was working toward the same blend of humanism and naturalism that I had in mind. In spite of my admiration for Plato, I could not but regard him as the gifted advocate of a vicious trend in Greek thought which prepared the way for dualism and mysticism. My sympathies were more with Aristotle's attempt to keep his feet on the ground.

As I look back on my own development, I realize that a philosophy is not created in an isolated mind, but in one open to the currents of doctrine. I count myself peculiarly fortunate to have come to maturity in a period of reconstruction. What I brought was a very persistent mind with a keen sense for realities.

I come now to my technical inheritance. My teachers stressed the historical approach to philosophy so characteristic of the idealist movement of the latter part of the nineteenth century. This was valuable, but could easily be overdone. There was need of analysis as well and of a clear formulation of actual problems. From the very first I focussed my attention upon the mind-body problem as crucial, and quickly saw that it could not be solved apart from a mastery of theory of knowledge. My first publications were along this line.

Like all American thinkers of this period, I was strongly influenced by James's *Principles of Psychology*. James Ward, also, exercised his influence upon my psychology and thence upon my theory of knowledge. These men brought out the continuity of the field of experience and the discriminative and selective activity of the mind. In this I believe that they anticipated much of the *Gestalt* movement and certainly moved far away from strict associationism. I felt that they had analysed the actual flow of experience more adequately than had either Hume or Kant. What was needed was a fuller appreciation of the part played by

the organism in all this. In both there lingered too much of the tradition of psycho-physical dualism. It is my belief that recent work in psychology shows a better sense of the response of the conscious organism and the part played by this in the construction and selection of percepts. Seeing the organism in its setting, I was led to think of perception as a selective interpretation of external things and to break away completely from the subjectivistic tradition that ideas are the objects of knowledge. I tried to work within the knowledge-claim and to make it pass from perception to critical judgment. From the very first, I found it impossible to find satisfaction in any form of the new realism. Knowledge could not be the actual givenness of the object; the field of consciousness was not a passive collection of things capable of entering and leaving it. No; knowing was a unique activity involving mediations and claims and pointing beyond itself. It was as near to the things known as we could get. Representative realism must be re-analysed and cut loose from Cartesian dualism. It was in this fashion that my particular brand of critical realism was born.

The eager mind absorbs and responds after its own fashion and in accordance with its own insights. Those we differ from are often of more value to us than those who vaguely agree with us. As time went on, I read chiefly in connection with the problems upon which I was at the moment working. But I have tried to make up for this by covering a wide field.

As I have already indicated, the problem of knowledge fascinated my mind jointly with the mind-body problem. It seemed to me then, as it seems to me still, that these two problems are in large measure inseparable. Make mind intrinsic to the organism, and you are at once forced to some kind of mediate realism. How can one think it out? The weaknesses of Locke must be avoided by laying more stress on an interpretative activity of the mind and upon the direct claim to know things and not ideas. Ideas must be seen as ingredients in knowing. Moreover, while the causal conditions of knowing an external object must be recognized, they must not be allowed to get in the way of the actual knowing, however much they underlie it. It has taken me a very

long time to deepen my insight into all these problems. I have worked on the same hypotheses with confidence and obstinacy these many years, but they have grown and become more delicate and adequate.

So much for the biographical side and for the influences which I can clearly recognize. I hope that this very brief survey will give the reader some appreciation of the temper and content of my mind and of my natural mode of approach to things. Now to my position in philosophy. I have headed my contribution "Realism, Naturalism, and Humanism," because I do think these terms describe fairly well my outlook in theory of knowledge, cosmology, and values. It is not because I am fond of labels that I have always adopted a term to characterize my position, but because definite positions deserve specific terms. In what follows I shall describe and seek to justify critical realism in theory of knowledge, evolutionary naturalism in cosmology, and humanism in the field of values and human activities. After presenting them separately, I shall try to bring them together as a whole to show how they fit together in one *Weltanschauung*.

II

Philosophical Creed

Theory of knowledge is a tantalizing, as well as a fascinating, field for reflection. The thinker must bear in mind the empirical nature and conditions of human thinking as well as the claim which knowing obviously makes to reveal its object. There has, I think, been of late a growth of insight in regard to both of these points. What is needed is the power to put them together.

It has frequently been pointed out that the purely scientific approach is naturalistic and postulates a conscious organism stimulated by things and responding differentially to these stimuli. But such a point of view really takes knowing for granted and is therefore incomplete. But I do not think that such a standpoint is vicious, for knowledge is a fact which theory of knowledge seeks to explain and interpret.

A study of the growth and conditions of knowledge uses the

results of psychology and logic. It is then seen how the external, physical thing is made the object of attention, and how a patterned content arises before the individual's awareness and is automatically identified with the object meant and reacted to. A careful study of perception would show how the content of perception is built up and discriminated, and how meanings, beliefs, and selections arise along with this content to give it a reference to an external object. We are at a fairly high mental level in perception, and there is a configuration here which must be acknowledged. This perceptual situation can, perhaps, be best described by saying that the category of thinghood has been achieved and operates at this level. Frankly, I would make much of categories, but I think of them as arising in experience naturally under the stress of the give-and-take of the conscious organism and the suggestions and pressures of conscious living. In this way, they are responsible achievements under the control of the external world rather than secretions of an inner self. The elementary categories are, if you will, natural ways of interpreting the world to which the organism is responding.

There is another feature of the field of perception which demands stress, and that is the presence in it of temporal and spatial order or arrangement. Here, again, I would differ from Kant and still more from the older English tradition. We do not begin with a chaos of sensations, but with a *patterned field*; and there is good reason to hold that the pattern is controlled in us by the actual arrangement of the stimuli coming to the organism. The activity of the organism helps to bring out this order, and such mental operations as comparison and discrimination further this end. The analogy of the camera has point, for the sense-organs operate after the same general plan, but we must not forget that the organism has inner resources which the camera does not possess.

But in this naturalistic and scientific way of approach to perception we are stressing conditions and processes as known, and we are not, in the strict sense, analysing perception as a claim to knowledge. This approach is not irrelevant, but it cannot take the place of the internal study of perception and

judgment as claims to know which must be criticized. The philosopher must undertake this supplementary investigation which works *within* the experience of perceiving and judging and tries to determine the nature and claims of knowing. And since the idealist has long maintained that the results of such an internal investigation conflict with the naturalistic assumptions of science, the work of analysis must be thoroughly done.

I need not go into the history of this internal analysis of knowledge and its claims. Were Berkeley, Hume, and Kant right in arguing against a frank physical realism? In my opinion they were wrong. The dualism between mind and matter, the assumption that we know ideas rather than things, the clumsy scheme of qualities inhering in a substance—all these unmastered traditions got in the way.

The total act of perceiving with its beliefs, categories, and discriminations is the most elementary unit of knowing the external world. Reflection shows that this complex is mental and intrinsic to the active organism. I beg to point out that, when I use the word mental, I have in mind no dualistic assumption, but only the recognition that we have here a peculiar activity of the individual. In taking the act of knowing seriously, we must realize that we are on the inside of this act and that the logical discriminations used in it are not self-sufficient atoms to be called mental entities. We have here a structure which must be taken at its face value. The mind is interpreting an object in terms of characters. It is thinking the characteristics of the object. Shift the point of view quickly from a knowledge-claim to a survey of what is given in and to consciousness, and these characteristics of things become characters of a logical sort undoubtedly sustained by the mind. But then we are ceasing to claim to know external objects. The direction of the mind has altered.

How does this position differ from naïve realism? In three main ways. First, it is more aware of the conditions of knowing; second, it is ready to admit the mediate, or interpretative, nature of knowing; and, third, it holds that reflection must work within perceptual knowing to lift it to more adequate knowledge of the

object. It sees that perception is dominated by practical interests and bodily perspective, and passes to science.

Let me summarize my results. In the first place, knowing is regarded as more than the awareness of abstracta to be called logical ideas. It is an interpretation of objects. Thus objective reference is intrinsic to the very nature of knowing whether perceptual or explicitly judgmental. This analysis rids us of the subjectivistic bias of traditional representative realism. In the second place, logical ideas are discriminations within a complex mental activity in which objects are selected and interpreted. We must not drop back to an atomistic psychology of sensations and images which ignores empirical facts. Our mental activity sustains for us an experienced structure in which we sense ourselves as interpreting objects in terms of predicates revealing their characteristics. This bit of redness, this instance of squareness, are logical characters enabling us to grasp the characteristics of the object. They are to be classed as mental only when we raise the question of their ultimate nature as related to the mental act of knowing to which they are intrinsic. In the act of knowing, it is their logical content which occupies our interest. We look through them at the object. Yet reflection, I believe, forces us to hold that the whole complex mental act to which they are intrinsic is a temporal affair expressive of the brain-mind. The only alternative is to hold them to be essences belonging to a realm of being other than that of physical existence. But this alternative theory seems to me less simple than the one I defend and more traditionalistic, more a reflection of Platonism.

The comment of the reader at this point may be somewhat as follows: Granted that the logic and psychology of this position is an advance upon Locke's and Kant's, due to the progress in both domains, does it not still hold that the characters held as predicates before the mind must resemble the qualities of the external thing? Yes and no. Sense-qualities fall away as we pass from naïve to critical claims and the appreciation of structure and relations increases. Now the structure conceived in the mind does, I believe, correspond to the structure of the object. It is because of this correspondence that the knowledge-claim is

justified; the logical idea does reveal the characteristics of the object. These characteristics must not be conceived in the old fashion as properties inhering in an unknown substance, but as the nature of the physical system known. An object does weigh so much, is so large, has such and such a texture, will do certain things under certain conditions. We must simply move away from the literal assignment of passive sense-qualities.

A few words on a point which has been misunderstood is desirable. I was led to deny the reality of a cognitive relation. This did not mean that I did not supply what the cognitive relation stood for—reference to an object and the claim to know it. The expression "cognitive relation" was connected in my mind with the conflict between neo-realism and idealism. In the English form of the controversy, at least, there was assumed a sort of tenuous relation between the mind and the object called awareness. Was this internal or external? Now my own analysis forced me to maintain that a physical object known is never literally present in the field of consciousness; the mind makes no existential contact with it except through the sense-organs. Knowing is a claim and reference to an external object mediated by meanings in consciousness. It is a sort of mental pointing and not a literal transcendence. This fact but brings out more clearly the unique nature of knowing. This mental pointing, however, is founded on the attitude and response of the organism in perception and the reflection of this in consciousness. Conceptual pointing but carries on this structure and develops it in terms of frames of reference. Knowing handles objects through internal substitutes which are supposed to reveal the nature of the external object.

But, it may be replied, while you rightly avoid a gross interpretation of a cognitive relation by means of stress upon internal reference and claims attached to ideas, does it not remain a fact that the nature of the object is present to the mind? This query demands a reply. I do not think that, existentially, the nature of an object ever separates itself from the object. It can, however, be reproduced in the mind as an achieved abstractum and be held by that mind as a revelation of the nature of the object. We

have here a logical, or better, a cognitive, identity between idea and object.

This problem brings out the fact that knowing is a kind of operation for which we can find no ordinary physical analogies. It depends upon the growth and use of distinctions, beliefs, and categories in consciousness. An object is cognitively present to the mind when it is known, but such knowledge does not involve the literal givenness of the object as an entity within the field of consciousness. Knowing is a looking at objects through the windows furnished by ideas. It is *sui generis*, though made possible by the situation and capacities of the organism.

In this very brief survey of some of the high points of epistemology we have now arrived at a stage which demands the discussion of truth. In order to secure clarity it will be better to limit ourselves to the question of what we mean by the trueness of a proposition. But, first of all, let me say that a proposition is to me a complex idea used in an act of knowing. It is a belief. Taken in this sense, a proposition seems to me to be called true when we consider it to give knowledge of its object, to reveal its object. Hence, I have always maintained that knowing is the basic idea which underlies truth. An idea which gives knowledge of its object is true. But, if this is the meaning of truth, what are the criteria or tests? It is often averred that critical realism has special difficulties here because of its doctrine of transcendence. How can you check up on the idea if the object is not given? And if the object is given, what need have you for ideas?

The proper approach is to ask what casts doubt on the truth-claim of a judgment. The doubt must be motivated and specific, otherwise we are merely doubting the ability of the human mind to know. When I come to analyse the situation, I find that the human mind begins in perception to interpret objects and that difficulties merely force a critical reinterpretation of this first interpretation. The basic postulate is the claim to know or, what amounts to the same thing at this level, the revelatory nature of our predicates. This postulate, if challenged, is confirmed by the success of our critical thinking. In other words, thought

cures its own difficulties by showing how new distinctions satisfy old conflicts. The manner in which perceptual illusions are shown to result from our position and from the nature of our sense-organs illustrates what I mean. Critical thinking is the only remedy for specifically motivated doubt. And this success of critical thinking can be indicated under four headings: (1) the consilience of established facts; (2) the logical coherence of ideas; (3) agreement of investigators; and (4) guidance and control over nature. These headings have been so often discussed that there is no need to go into detail. It will be noted that I assign a place to both the logical and the larger pragmatic tests. But I am convinced that the very advance of thought rests on the belief that sense-perception is revelatory of nature and that the proper use of it enables us to penetrate into the characteristics of the world. The logic of science gives, I think, the proper use of sense-perception.

As conclusion of this summary account of critical realism, let me point out what I think is important about it as a direction of thought. It represents a deeper insight into the nature of human knowing and a greater awareness of its conditions. In place of knowing as a semi-magical intuition or compresence of mind and object, it grasps knowing as an achievement in which ideas function, ideas being distinctions within the field of consciousness used in accordance with slowly evolved meanings and beliefs. In this way it shows how organic activity flowers into knowing. It can be regarded more as a deepening of natural realism than its complete rejection. What, then, can we know about the external world? Essentially what science has worked out—structure, relative dimensions, relative mass, energy-content, behaviour. Theory of knowledge does not so much dictate to science as interpret it.

In the next section I shall pass to cosmology and defend naturalism. In anticipation I would point out that we must not forget that we have a double knowledge of our own organism and, aided by communication and analogy, other organisms. To forget this would cause unnecessary mistakes in cosmology.

III

Perhaps the best way in which I can introduce my exposition of naturalism is to tell why I adopted it as a term when it was largely in disrepute. What are the essential things for which naturalism has always stood? As I saw it, they were the following: (1) the self-sufficiency of nature as against popular supernaturalism or the sublimated sort called transcendentalism; (2) the basic significance for our world of space, time, and causality; (3) the denial of concentrated control in the universe and, in this sense, the acceptance of pluralism; and (4) the rejection of the primacy of mind. Now I was convinced of the essential truth of these cosmological principles and felt that their acceptance could best be summarized by the term naturalism.

On the whole, too, naturalism was a much more plastic term than materialism. To free it from its temporary disrepute did not seem impossible. Perhaps the ultimate result would be a new form of materialism capable of including mental activity and human motivation by values, but naturalism was clearly a step in the right direction.

The rejection of idealism in theory of knowledge, which had been coming apace, was already shaking objective idealism and spiritualism to their foundations. Critical realism implied physical realism, and physical realism is at least half-way to naturalism. Only the mind-body problem stood in the path. Achieve the idea of mind as intrinsic to the living organism, and naturalism is full-fledged. And, as I pointed out, I had always carried this problem in mind while I was working at theory of knowledge. Physical realism, plus the rejection of dualism, spelt naturalism.

Physical realism had hitherto gone with a strictly mechanical view of all physical processes and with the assumption that knowledge gives a penetrative vision of the stuff of the physical world. Could both of these assumptions be challenged? If we know only the structure, behaviour, and relative masses and energies of things by means of scientific investigation, it follows that we cannot intuit physical systems in some more direct way. Any static, sensuous representation betrays the habits of naïve realism. For this reason, it is suggestive to say that we have knowledge about nature rather than acquaintance with it. It is illuminating knowledge, but it falls short of that intimate vision which forever haunts us. Again, reflection seemed to show me that the mechanical ideal was a hasty dogma set up in opposition to final causes and that the character of physical changes had to be discovered empirically.

Working along these lines, I was more and more convinced of the significance of organization in nature. Do not physical systems respond as wholes, and is not the nature of this response a function of the kind of organization achieved? Mechanism in the strict, traditional sense meant external relations, so that each event expressed a specific impact, or complex of impacts, upon some unit. For such an interpretation of nature, a physical system was in no sense an actual unity. Instead, it was a constellation of movements.

But, if we take organization seriously, we must accept the rise in nature of *natural kinds* with specific properties expressive of the system. From this it would follow that we must expect novelty and origination in nature and what may be called levels of causality. Uniformity of process would no longer be the scientific ideal. To reduce everything to one type would now be looked upon as a false and impossible objective. Careful study must replace dogmatism.

A comment upon the logic of this approach may be worth while. It seems to me clear that such a stress upon the *specificity* of physical systems is empirical rather than mystical. It does not cast doubt on the value of analysis, for surely it is impossible to conceive a physical whole which is not a togetherness of parts. What it does accomplish is the clearer distinction between logical analysis and physical analysis. In logical analysis, we seek to see parts *in* their relations by constructive discrimination; in physical analysis, we seek to break down a physical system into simpler systems which we are apt to call parts. Really, these simpler systems are not parts in a literal sense, for that would imply that disintegration made no change, a view expressive of a mechanical dogma. Now physical analysis often aids logical

analysis, and is so used by science, but it is not to be identified with it. In logical analysis of a physical system, we must have a sense of the whole as constituted by its parts and of the parts in their relations in the whole.

The frank acceptance of the significance of organization led me to reject what I called reductive materialism and to advocate the outlook, called evolutionary naturalism, which held that new physical systems arise in nature under favourable conditions, and that these new physical systems have properties which are functions of their organization. It was thus that I was led to interpret vital systems and, a still higher stage of the same, mental or intelligent systems. Life is not a non-natural force coming from outside, but a term for the new capacities of which nature has found itself capable. When certain intimate chemical relations and arrangements are achieved, the system can maintain itself under certain conditions of heat and light. And, upon this foundation, a new, experimental process goes on which gradually achieves those capacities of behaviour which we call intelligent.

Thus far it will be remembered that I am looking upon nature in that external way which behaviourism has emphasized. When I come to the mind-body problem, I must bring in, as supplementary, the fact of self-observation. And, of course, both science and human life in general involve *communication*, something not found at the lower levels of nature.

While I was working on these lines, the books of Alexander and Lloyd Morgan were published. It would seem wise to contrast my own distinctions with theirs while acknowledging how much we have in common.

Emergence has become the accepted term for novelty or origination in nature. If properly qualified, it seems to me as good a term as any other. Clearly it stands for epigenetic evolution with stress upon the significance of organization or relatedness.

For me the basic fact is the reality of change in physical systems. Properties are not stuck on to physical systems from the outside, but are expressions of their particular structure and method of 'go.' Much has been made of the epiphenomenal

character of new properties. Such objections seem to me to apply to Alexander's system more than to Lloyd Morgan's or mine, for qualities simply appear as additions to the old to the immediate realist, however critical he may be in his epistemology. Colour bobs up in space-time in some mysterious fashion. But if the physical system is always the unit of activity, a change in the physical system means a new mode of activity. Properties are not entities, but expressions of the changed nature of the system. And it must be remembered that, for Lloyd Morgan and me, all sensory data are in the brain of the observer, itself a unique kind of physical system. It is the pattern of these data which reveals the logical character of the external system perceived and critically known.

Another point. I take the famous expression, natural piety, to signify nothing more than the part played by observation and experimentation in science. It is another term for empiricism as against deductive rationalism. The world is what it is, and we must study it. The object dictates to us as knowers.

It does not seem to me, however, that such empiricism precludes explanation or subordinates it to description. To connect a property with the particular organization of a thing is to explain it. To show how one organization passes into another is to explain it. All scientific explanation, so far as I can see, is the gaining of insight into the structure, relations, and operations of nature so that particular events can be interpreted. Explanation is knowledge and cannot demand more than knowledge can give. And it is clear that science passes beyond mere empirical description and summary of events to the discernment of the structures and processes in nature in which these events are embedded. In short, in the logic of science, description and explanation are terms for stages in explanation, and explanation can never go beyond the insight which knowledge gives.

As a frank naturalist, physical systems are for me ultimate, and I have seen no reason to postulate an extra-physical *nisus* of the sort that Morgan and Alexander acknowledge. Nature is for me intrinsically dynamic. I would express this by saying that causal uniformity reflects causality and causality is the 'onward

go' of physical systems. In fact, such postulated *nisus* seems to me a shadow of dualism resembling the *élan vital* of Bergson. Evolutionary naturalism is a monistic, and not a dualistic, outlook.

We are now ready to consider the mind-consciousness-body problem. I am persuaded that this problem is simply being outgrown by reason of the vanishing of old traditions and assumptions. The disappearance of reductive materialism, the growth of behaviourism, the arrival of a clearer realistic epistemology are all factors. Intelligence can be studied from the outside and turns out to be a capacity for certain modes of behaviour which involve memory, integration, and novel combination of response. Defined objectively, it is a term for modes of operation which emerge at a certain level of evolution, modes of which there are degrees which must be considered qualitative. But self-observation gives additional knowledge of the operation of intelligence as it appears within consciousness at a level of awareness—that is, conscious attention. It is at this point that basic metaphysical questions force themselves upon us.

Naïve materialism was dominated by two things, against which the evolutionary naturalist is on his guard: (1) atomic mechanism, and (2) a confident vision of the very stuff of the world as somehow inert, internally homogeneous, solid, and alien to those qualitative events which we call feelings, sensations, and thoughts. Without fully realizing it, naïve materialism was built upon the traditions of dualism. But we must surely challenge this whole perspective. What do we know from outside of that pulsing, integrated system the brain? Very little. We can guess, at most, about the action-patterns which are built up within it under tensions and which discharge into the motor-nerves and thence into the muscles. We know that past-experience is somehow conserved in this delicate organization and past facilities preserved. The brain in its organic setting of muscle and gland *is* the mind. But, from the outside, we cannot catch a vision of this system as it is for itself. And to modern thought it is less a collection of wooden atoms than a web of activities pulsing in a system which, though spatial, is organic. There is no cognitive vision of

its intrinsic nature which forbids us to say that consciousness is there running its course.

But what is consciousness? To say that it is the concrete flow of the field of experience is not enough, though, I believe, correct so far as it goes. Here, again, we must avoid the traditions of dualism and refuse to consider it an immaterial kind of stuff. It would seem to be better conceived as a qualitative web of events intrinsic to the operations of the brain-mind. To appreciate this statement to the full we must realize that in consciousness, and in it alone, we are as conscious selves on the inside of reality. In knowing, we seek to transcend our own being and grasp the characteristics of the object known; but in feeling and thought we are our feelings and thoughts.

What prevents us, then, from holding that, in our consciousness, we are literally on the inside of the functioning brain-mind? As we discriminate in consciousness, so does our brain-mind discriminate and differentially respond to situations. Here is a *dimension of being* which external knowledge could not reveal to the observer, and which we therefore find it hard to think as intrinsic to the brain-mind, so long as we are dominated by an external approach to organisms. That is why a critical epistemology is so necessary for a clear insight into the mind-body problem.

It may be well to point out that I sharply distinguish between awareness and consciousness. Awareness is a characteristic function and contrast within the field of consciousness. It expresses anticipation, interpretation, and attention. Thus I am aware of the postman who is coming up the walk whistling. This awareness is complex and mediated in all sorts of ways, and it constitutes an active configuration within the field of consciousness. I am more and more impressed by such condensed accumulations as meanings, which are built around verbal symbols and attitudes. Clearly the field of consciousness reflects integrated mental systems which themselves are the activities and situations of the organism. There is mediation and originative integration all through it. The field of consciousness of any one moment is part and parcel of the functioning brain-mind.

It follows from this interpretation that I am not sympathetic

to pan-psychism. It seems to me just the contrary error to naïve materialism. It is an attempt to find a stuff open to inspection. But consciousness seems to me a web of patterned, qualitative events rather than a stuff. It is not conserved but evanescent, coming and going, but sustained by a slowly evolved system of propensities, habits, and mind-brain systems. It falls under the category of event rather than under that of substance. The ultimate fact which I must accept is that the brain-mind system, when functioning, has this qualitative dimension. And since here alone are we on the inside of a physical system we have no antecedent with which to contrast it and cry miracle. Novelty there is, but a novelty undoubtedly prepared for in the very nature of organic systems. It is our inevitably small acquaintance with the inside of physical systems and our broad knowledge of their revealed structure and behaviour, as mediated by our sense data, that makes the assignment of consciousness to the brain-mind so startling. In short, I am not persuaded of the necessity of either pan-psychism or of the Spinozistic postulation of universal concomitance of the psychical and the physical. Neither view seems to me to take organic evolution seriously enough.

One other question in cosmology I must touch upon before I pass to the locus and nature of values in the new naturalism. It is the attitude to be adopted to the traditional opposition between monism and pluralism. Perhaps it would be better to say singularism and pluralism, since monism has been so frequently employed as a term in opposition to Cartesian dualism.

It is, I take it, obvious that singularism has been primarily a feature of objective idealism. The motives for it there are logical and appear in both Hegel and Bradley. I am persuaded that a realistic epistemology and a naturalistic cosmology change the venue entirely. Since I take space and time as significant categories in our knowledge of nature, this distinction between singularism and pluralism becomes simply one of the *degree* of interdependence in nature. Singularism seems to me to stand for homogeneity and tightness of union, while pluralism means heterogenity and *degrees of freedom*. If pluralism is interpreted in this way, I am a pluralist. Let me explain.

Take an organism. Clearly it is subject to the same gravitational relations as a stone. There is one kind of physical nexus binding the physical world into one system. And if the physical world were homogeneous, not much more would need to be said. But if we take organization seriously, we must admit the development of systems within this basic continuity, systems responding in accordance with their internal nature. While more complex and more highly integrated levels are reared within the system of nature and cannot violate its demands, they can yet add capacities for which these demands give permission and latitude. Thus human behaviour does not violate any of the demands of the inorganic world, but merely explores and expresses possibilities left open. It is this openness to novelty which evolution signifies. Thus singularism stands for general relatedness of the sort that physics investigates, or for a mystical unity, while pluralism stands for differentiation.

There is another aspect of this question which interests me. If we take the universe as a space-time system more organic than mechanical, there still remains the problem of control. Is control a function of the whole? If so, the control of a particular system must be dominantly lodged outside itself and thus external to it. Why? Because it is so small a part of the system. Now I do think that this argument holds for a homogeneous system, but I am not so sure that it holds for a heterogeneous one. In a heterogeneous system, self-control increases among the parts as these gain relative autonomy. External control sets a problem for self-control by giving its conditions. To make the matter short, I do not think that control is a mere function of the whole, but a struggle between the parts in a whole. The part may achieve new ways of doing things which give it new degrees of freedom. Thus human freedom means what intelligent and social organisms can do within the kind of a world we find ourselves in.

I can only indicate the bearing of this analysis upon the age-old antithesis between freedom and necessity. It implies—or so it appears to me—that freedom stresses the side of pluralism and calls attention to the possibilities relative to actual conditions. It stands for relative self-determination as against a control

exercised from outside by force of numbers and magnitude. It is a declaration of the significance of quality, integration, and kind. And such freedom is rather the expression of the system undergoing change than a claim for a dualistic free will. Surely what happens has its conditions and soil. Freedom is a protest against mechanical determinism and in favour of the admission of activity and creativeness in nature, a creativeness whose range and quality varies with the level attained. Of course, this is only a hint of my way of approach to this thorny subject. When applied to man, there would be need to grasp the rôle of intelligence and the meaning of choice.

IV

Can humanism and values find elbow-room in naturalism? It was the common thesis of ethicists of the last generation that this was impossible. And, granted a naturalism wedded to mechanical, or reductive, materialism, I do not think that they were far wrong. If mechanical relations are the sole determinants of conduct, our values must be epiphenomena at least, if not illusions. What are the new possibilities in the field of value-theory?

The first thing to do, surely, is to find out what we mean by values. The next thing is to determine how values become effective in reality.

Axiology is certainly a fascinating field, but one which has not yet cleared up. It has seemed to me that part of this mistiness has been due to the fact that epistemology and cosmology lagged. In what follows I shall content myself with indicating what seem to me the fruitful distinctions to be made.

I would, first of all, distinguish between explicit valuations directed toward objects and what may be called implicit valuations, or value-experiences. It is out of the second that the first crystallize through concentration upon some object.

Implicit valuations are, of course, positive or negative, and, taken over a time-interval, may even be a mixture of plus and minus. We can have a good time, an unpleasant time, or something of a mixture of the two. These value-experiences may be simple or complex, elementary or sophisticated. In them is reflected the demand of the situation and the level of the personality. The psychology of value-experiences needs study. Feeling and desire are obvious ingredients, and of these feeling is an invariable psychical matter. Desire is an interesting variable affected by all sorts of conditions which play upon the propensities of the individual. But I am inclined to hold that intellectual insight enters as an ingredient in value-experience and gives it what I would call perspective and a framework. I quite admit that desire and feeling are essential ingredients, but I hold that human value-experiences would be entirely different but for the depth and breadth which ideas give. All these factors are, of course, organic to each other.

These value-experiences are resident in consciousness, and their existential status is that of consciousness itself. Hence our solution of the mind-body problem gives us guidance here.

Let us turn next to what I have called explicit valuations directed toward objects. These may be called value-judgments in that they express an interpretation of an object. The problem before us is to decide how value-interpretations differ from strictly cognitional interpretations.

At the level of practical life, our interpretations of objects are both cognitional and valuational at the same time. Value-predicates mingle with descriptive predicates. Is it not clear that, at this level, the meaning of an object for ourselves dominates our effort at interpretation? Knowledge is an instrument, in the main, for our response to, and use of, things. We are agents facing life and trying to make the most of our surroundings. We are seldom interested in objects in a calm and objective way, but link them up with our interests and purposes.

Out of this practical attitude there has gradually differentiated all those specialized attitudes which we call economic, moral, and political. In all of these the significance of objects for our individual and social lives dominates. We are not trying to get at the object itself out of curiosity, but we are seeing how the object bears upon us and what we can make of it.

It is the gradual rise of pure cognition as an *ideal* that has made all this clear. In pure cognition our aim is to think the object as it is in itself and in its context of objective relations. We seek to decipher the characteristics of objects; our aim is to be intellectual spectators. The object is our standard.

Does this not throw our explicit valuations into relief? We now see that in valuation we are interpreting the object as it bears upon our lives, upon our desires, feelings, purposes. The meanings which now arise are value-meanings and are very different from the descriptive meanings explicit in pure cognition. In the two cases we are not trying to do the same thing.

Value-predicates are, then, objective in that they are interpretative of objects, but they are not cognitional. They make explicit what the object means to our lives and not what the object is in itself.

It has seemed to me that this analysis makes the situation clearer than the traditional term relative does. Values are relative to human needs and demands because these are active in their determination. But the significant point is that in valuation we are not trying to do the same kind of thing as in explicit cognition. In both cases we are dealing with objects, but not in the same way.

A value-predicate is a function of (1) the nature of the object, (2) the nature of our interest, and (3) the situation which is relevant to that interest. We may, accordingly, speak of these three factors as conditions of value.

Again, we may distinguish in explicit valuation between end and means. We have, then, instrumental values—that is, objects valued as instruments, and telic or end-values.

But I must hurry to my conclusion. If values are as I have analysed them, they are either predicates or objects as valued. When we raise the question of the efficacy of values, all we should mean is the part played in our volitional decisions by the value which we assign to objects. It is in this way that values secure a grip upon reality. The concrete agent is the self; apart from the self values are abstractions. And, if our analysis has been correct, values are expressions of the self in its relations and

inevitably pass over into action. It is only for those who look upon values as eternal and transcendent that the question of the efficacy of values becomes puzzling. They must postulate a power in these values to attract our souls. But is this not metaphor? Is not self-expression the thing? Are we not integrations of tendencies, so that attraction expresses the stirring of some impulse in ourselves when exposed to stimuli interpreted to our souls by our minds? Our values are human values.

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Also articles in various philosophical magazines.

CONFESSIO PHILOSOPHI

By EDGAR A. SINGER, Jr.

Born 1873; Professor of Philosophy, University of Pennsylvania, Philadelphia.

CONFESSIO PHILOSOPHI

It has been said, boyhood is religious, manhood forgets. But not all men forget; of those who cannot, part is able to follow in the old, part must try new ways. From the first come our priests, who know; from the second our philosophers, who seek—for philosophy either is, or else involves, the search for a religion. This search is of a nature to try men throughly and sort them; of those who set out on it some end in a finding, some endure till the end, some faint by the way. The last is the easiest solution, and in the toilsome way through experience to religion, few endure for all the length of their days; most resolve themselves into good citizens—having learned at last to follow, or learned at least to forget. And who shall say the world has not been gainer by these, philosophy's losses? But must we suppose the "lost ones" also to have won?

I wish I knew; for then this confession might have been a religion—might have been a creed in the hand instead of one in the seeking. But then, it would not have been written; not at least by a philosopher, that unaccepted lover of wisdom; nor yet for philosophers, who cannot be moved to accept. It is not for such as we to offer creeds to one another, who cannot afford them ourselves. We formulate in order to revise, and when one of us is asked (as on this occasion) to account for his creed in terms of his life,[1] what is left for him to do (if he would do his best to comply) but to recall the dissatisfactions that have pushed him on and are pushing him? His life will come before him as an education not yet complete; and if he would make a story of it, his only way can be to lend fictitious sequence to a play of influences dividing, not his life, but his fairly continuous attention. Thus may anyone, however blurred the memory of his own unimportant days, say with a certain truth, he has been to school to his century (itself a learner from others)—a school whose lessons he can now recall

[1] "To accord with the plans of the Committee, each article should embody its author's philosophical creed, together with the circumstances in his life history which influenced him in reaching it. We are asking in short for an intellectual autobiography. . . ."—Committee.

only in the order of their offering, not of his receiving. Where his own reflection on this experience of the years has found some formulation, of this he may speak by the book; but the only part of his "life" that can seem to himself living is the part that is being lived. Here ferments a lively discontent in all that has gone before, from which if from anything must come his hope of bettering the work of his hand.

In some such way as this your philosopher would order the story he is invited to tell: however little it may profit his comrades in the cause, it must, one feels, have its comfort for the "lost ones" of the last paragraph—from all such restless philosophy *they* at least are at rest. If besides it convey to any the singular satisfaction there is in that other repose, that dynamic content in the endless task of building and building always anew—why, then it will not have fallen far short of what was asked for; it will have revealed the psychology of a philosopher, though of one no different from another.

But first, by way of preface, what has held this philosopher from joining the majority; those who have come to rest? Of these we counted two classes: such as had found their religion, and such as had left off the search. The first, though lost to philosophy, have in no wise defected from its cause: never have they forgotten, nor is it for us to say they have lost what critical faculty once left them discontented with the finished things of the past. Now they are content again; and we who are not toil on: they perhaps are the blest; and whether their inability to hand the blessing on comes from their want of reason or ours of understanding, how shall we surely know? Where, indeed, they have given reasons for the various faiths that are in them, we may touch on these as we go and hint at our own reasons contra. But where they have offered none, where they have come to contentment in mystical "creeds outworn"—as once they judged of creeds—why, there we can neither contemn nor envy what we so little understand. We can only know that as yet such things are not for us.

But the second class of those who have found rest—in forgetfulness, namely—what shall we say of these? I believe I was about

to say something very stupid, very respectable therefore: that we could learn nothing of religious interest from those who had forgotten religion. But when I came to think on this which I had always thought, a difficulty discovered itself I had never discovered before: how in the world are we to distinguish between a surrender of religion and a religion of surrender? Is not a "philosophy of forgetting" itself a religious achievement, a story carried to its end, and ending in a creed? No sooner has one put the matter to oneself in this way than one realizes how long a chapter might be written on the "religion of forgetting." Nor could this chapter be unimportant; it, too, would consider how men had found peace—or thought they had, for reasons well expressed or readily divined. No, I repent me of that first hasty diremption; none have abandoned philosophy save those who have found what they sought, the religion in which they could rest. And when I come to think of it in an autobiographical way, it is strange I should ever have overlooked the philosophy I had learned from those who in precept or example most flouted its name; so that if this is to be a story of my philosophic education it cannot do better than begin arguing itself out from some very low beginnings.

I

A philosophy inspires confidence for what its sympathies take in, not for what they leave out. Austerity is a poverty; and one mistrusts either the experience or the reflection of the philosopher who can find no thought of religion in a love-song of Catullus or the wine-lilt from a *Copa*—

pone merum et talos, pereat, qui crastina curat!

Why not, then? Why not, if one is aware?—

Mors aurem vellens 'vivite,' ait, 'venio.'

You say, the *why not* is too plain to need giving: who takes no care for the morrow, let the morrow take care of him! Well, yes; that we all know and are agreed on, *provided there be a morrow.*

But need there be? For to let there be is a voluntary act, "and [as Hobbes remarks in another connection] of the voluntary acts of every man, the object is some good to himself." Say, then, of this *vivamus-amemus* philosophy not that it is foolish; but that its only wisdom is tragic. As a place to pass a holiday, the tavern is a poor place and Lesbia's arms no better; as a place to spend a last day, either will have scored life with one day too many. But is either worse than other more approved devices for "putting in one's days"—till some reason have approved itself for putting them in at all? Why not put them out? (*Mors aurem vellens* . . .)

A philosophy of forgetting is, then, a religious achievement, but it ends in the cult of death; and that it should ever have been sung in such gay numbers (only not so gay as they sound, perhaps—"ils n'ont pas l'air de croire à leur bonheur")—this only shows those who sang them to have been no true philosophers arrived at attainment, but just weary mortals tired of thought. Yet what more are the accepters of any religion that has come to terms with life? None but gives promise of rest to some manner of soul; but is it that thought shall find peace there, or that there one has peace from thought? All religions pretend the former; all philosophers suspect the latter—and toil on.

Which would seem to mean that philosophers are patient beyond all other men. And so they are and must needs be; yet they are impatient, too, in their own peculiar way. They resent being asked to retravel roads they have traveled before, over and over again. Of these ways, none more familiar than the old ways of hope deceived—let this story take for granted the cumulated pessimisms of the past. No need to follow anew the successive disillusionments of a noble mind as our Schopenhauer realized them: more beauty, fairer laws, gentler hearts, love with its genius for pity—these, we may well agree, could end in but one life, the life of The Man of Sorrows. As in what but sorrow could nobility end, having watched the hopes of life vanish one by one in a depth of understanding, while "life like a pendulum swings on, between desire unsatisfied which is pain, and desire satisfied which is ennui." Then, better to forget: the philosophy of surrender that began with a refrain from a wine-shop ends in

a hymn to forgetting. Only, not in *askesis* lies the perfect forgetting.

One who has found identical reason in the "let us forget" of wine, love, asceticism; identical unreason in all "penultimate words," is not likely to have taken the sadness born of thought for a discovery of 1819. If he were, there is one, Schopenhauer, to prevent him; than whom no philosopher has been more anxious to feel all history at his back. But if Schopenhauer did not begin, neither did he end the world's education in despair: even while he was writing, unknown to him across the Alps one of another race and other muse was exhausting the tricks of hope. Of this poet a word later; for the moment I would no more than dwell on the historical significance of this word, *exhausting*, in whose suggestion lies the one quality I take to be modern in the story of pessimism following on the early eighteen hundreds. Anywhere in the literatures of Europe the religion of oblivion could be illustrated; but where in the tradition we inherit should we find alternative solutions of life so thoughtfully examined, so patiently analysed, so courageously rejected as in the whole art of the last hundred years? Or what higher tribute could be paid the increasing reflectiveness of these years than to note their gradual tolerance, their growing appreciation, their deepening understanding of the lives of a "Jack" and a "Jude," of the worlds of a Maupassant or a Chekhov? No longer is the portrayal in art of the grey and the dark, however unrelieved, taken for morbidity; nor should it ever have been, for nothing can be more wholesome than the discouragement of complacent optimisms, nothing more salutary than the lesson that hope in life, if it is to be had, is not to be had cheap.

However, in presence of such manifold disillusionment the mind is endangered of losing the one hope to which it has still a right, the hope that must outlive disillusionment itself, the hope, namely, of finding some reason for hoping. But before thought can turn to any fresh adventure in this sense, it must have simplified the bewildering display of lives-that-have-not-worked, by deducing their common collapse from a common principle of failure. Now, by nearly all this literature, the verdict of failure

has been returned the moment a life has been brought to betray its unrest, inner and incurable; but, as no conscious life knows rest or can know, the verdict is always the same; whereon one by one all souls seeking peace are recommended to oblivion. To this, I say, most pessimism reduces its procedure; yet not all. For sometimes, and that where the thought goes deepest, our literature reveals a questioning self-critical wonder as to whether even this finding is the darkest thing we may find. Does the depth of tragedy rest indeed in a hopelessness of peace; does not a deeper lie in the horror of peace itself?——And as this question brings to its close the first period of my education, let so much of the story end, as it began, on a purely historical note.

In the year 1826, across the mountains from Schopenhauer that pale poet to whom I alluded was reading a traveler's tale newly brought from the East. One paragraph in particular caught him and held him: it sketched a scene from life, but life of a peace so perfect one can only liken its ways (as did our poet later) to the peaceful ways of heaven. Others than Leopardi may find matter for thought in this note, wherein the traveler narrates of a tribe of Asian shepherds how "plusieurs d'entre eux passent la nuit assis sur une pierre à regarder la lune, *et à improviser des paroles assez tristes sur des airs qui ne le sont pas moins.*"[1] What were these "sad words sung to tunes no less so," the traveler fails to note; but all the world knows how Leopardi found them, and to what melodies he put them:

> Che fai tu, luna, in ciel? dimmi, che fai,
> Silenziosa luna?
> Sorgi la sera, et vai,
> Contemplando i deserti; indi ti posi.
>
> Ancor non sei tu paga
> Di riandare i sempiterni calli?
> Ancor non prendi a schivo, ancor sei vaga
> Di mirar queste valli?
>
> Somiglia alla tua vita
> La vita del pastore.

[1] Baron de Meyerdorff, *Le Journal des savans*, 1826. Note furnished by G. Mestica, on authority of Leopardi, *G. Leopardi, poesie.*

II

The voice of the *Canto notturno* dies away on a question—

> Dimmi, o luna: a che vale
> Al pastor la sua vita,
> La vostra vita a voi? dimmi: ove tende
> Questo vagar . . .?

To this perfect voice of the twenties, when does that answer begin we have come to know so well—the answer pointing to *progress*? (Not that progress is new—a Lucretius could paint it, a Condorcet paint it well—but events of the sixties and on gave the conception an empire it could never have held before.) My retrospects, as has been seen, like to begin with *suspicions*; and a suspicion of things to come is surely to be caught in the fifties, in songs of *The Rolling Earth*, in songs of *The Open Road*—songs that had already come to know the universe as a road—

> To know the universe itself as a road, as many roads, as roads for traveling souls.
>
> All parts away for the progress of souls,
> All religion, all solid things, arts, governments—all that was or is apparent upon this globe, or any globe, falls into niches and
> Corners before the procession of souls along the grand roads
> Of the universe.
>
> Of the progress of the souls of men and women along the grand
> Roads of the universe, all other progress is the needed
> Emblem and sustenance.
>
> Forever alive, forever forward,
> Stately, solemn, sad, withdrawn, baffled, mad, turbulent, feeble, dissatisfied,
> Desperate, proud, fond, sick, accepted by men, rejected by men,
> They go! they go! I know that they go, but I know not where
> They go,
> But I know they go toward the best—toward something great.[1]

In 1859, comes the *Origin of Species*. Phrases gather round it: "the struggle for existence" (Spencer), "the survival of the fittest"

[1] Walt Whitman, *Leaves of Grass* (first edition, 1855), ed. McKay, 1894.

(Wallace). Evolution is upon us. At the end of the century, Nietzsche. The *Song of the Rolling Earth* has found words: "I sing to you the Superman, the Superman is the meaning of the earth." Evolution has evolved into Progress; Life has found a Goal.

After all this rush of history, one may afford a moment for reflection; and nothing feeds reflection as do the contrasts of history. But between those offerings of the past whose lessons have filled these first two chapters of an "education," the contrast is complete. From suspicions caught in a wine-shop developed that philosophy which seeking a religion of Peace found one of Forgetting. From a suspicion bred of the Open Road came an opposite motive which sought, not to end strife, but to give to strife *an end*. This end it found in the Superman; it made of this Goal its God. But no life wanted that Forgetting; can any want this God? What makes me think none can has been argued more fully elsewhere; but I may be allowed to resume it here by way of pointing the moral of my second lesson in failure.

One who has written *goal* for *god*, may have seized on an idea of real religious importance; but subject certainly to the condition that his god be at least a goal. And was Nietzsche's—though he said so? Let this Superman's relation to the present be all that Nietzsche would have it—a prevision of to-morrow's "fittest," if he will. Preparing the way for these a day may be planfully spent eliminating "the many too many"; but what shall we plan for the morrow? The same? And for the next day?——

> What is the ape to man? A jest and a bitter shame.
> And what is man to the Superman? A jest and a bitter shame.

Here Nietzsche's imagination stops; but yours and mine go on—

> And what is superman to the Supersuperman? . . . And what?. . .
> And what? . . .

There is a mathematician lurking in the soul of the most romantic of us, and that mathematician will at once grasp two things: first, the series our imagination here constructs is infinite; second, *there is nothing about this infinite series to make it converge*. That it is infinite is no matter; that it approaches no limiting

conception is fatal to its defining a goal. Very likely (I should say quite certainly) a goal to be worth striving for has to be infinitely remote, essentially unattainable; but then with equal certainty, it has to be indefinitely approachable. There is inspiration in endless progress; there is none in endless change. To climb inexhaustible stairs which approach no conceivable landing to mark there *up* from their *down*—as lief be a caged squirrel busily turning its wheel. Or as lief be a Zarathustra, busily helping The Moment *to return*!——

> For what of all things can come to pass, must they not again pass along this endless road that stretches before us?
> And this slow spider crawling in the moonlight; aye, and this moonlight, and I and thou in the portal whispering of eternal things, must we not all have been before?
> And must we not return again along that long road—must we not eternally return?
> So spake he, and always lower and lower—afraid of his thoughts, and afterthoughts.

But, you say, never mind Nietzsche's lack of definition and the vagaries of Zarathustra; is there anything in the *meaning* of evolution to prevent it from defining a goal? I think there is indeed,——in "evolution" conceived as a struggle for existence with a survival of the fittest (to survive). Here is room for development if you please; but a development of means (weapons of warfare) to an end repeating itself in endless sameness. However, if not the Will-to-live, let us suppose a triumphant *Wille zur Macht* to evoke a limiting figure, the altogether lonely figure of a Conqueror of conquerors. Yet could I not call this goal a god. For a goal to be a god must be not only *goal*; it must also be *ideal*. Unattainable limit of approach, so much is every goal; the ideal adds one condition—it must be a goal *desirable*. But the way to the All-conqueror, does it add contentment to contentment, summing toward a limiting concept of *desire fulfilled*?

Among the many "influences" this autobiography has had no time to take count of, is one its hero seems to admire more than do some of his neighbours: it is the patient baffling wisdom of certain earlier chapters in which Hegel unfolds the *Phänomeno-*

logie des Geistes. There, for example, will be found that curious dialectic of *the master and the slave*; there, that apparent paradox of the dependence of man and god on recognition, on *acknowledgment by another*. *Anerkennung*—that is what we live by, and without it we are nothing. It is a deep thought, for *Anerkennung* is not applause, it is not adulation, it is nothing a slave could offer a master—not if the one were really slave, the other really master! But it is what the *nous* in the highest rational being might offer to the *Nous* that rolls the outer heaven. Rolls the outer heaven and the inner spheres, stirs the muddy depths of earth, all to produce—what? That highest rational being, the one being capable of recognizing his God. So much, from the most ancient times, has God effected that he might be acknowledged God by one who has knowledge of godhood. But our All-conqueror will not have become the All-conqueror till he shall have slain, or subjugated, the last of his own kind—the last who had been competent to know *power* from *success*, the last whose esteem had been of any value. Why, a champion prize-fighter reduced to such extremity could think of nothing better to do with his undisputed leisure than to devote it to the training of promising material, his heart meanwhile set on that distant day when he might once more share the world *with a fellow fit to prove him*. Then, and only then, will he recover that *Anerkennung*, which in destroying he had destroyed himself.

No; not if we can help it shall we ever climb those flights that mount from loneliness to loneliness, to heights where Cæsarian madness waits, peerless and alone.

III

"Lonely ambition—peaceful acquiescence in a common lot! The history of human relations is a struggle, more often than not a compromise, between these ideals. There is enough inspiring in each to make any man of understanding long for it; there is enough repulsive in each to turn any thoughtful soul against it. Wherefore the gruesome spectacle of world-war is but the outer and visible sign of the struggle that goes on every silent moment

within the heart of each, as the volcano is but the overt violence of long sullen rumblings that have gone before. And so things must last if and so long as we really want two irreconcilable ideals: compromise must follow makeshift, war must punctuate peace, world without end."——To such melancholy purport did the foregoing lessons of an historic education once summarize themselves in the learner's mind.[1]

Then into a world so distraught, he imagined the advent of a new philosophy, which to mend the rift of historic thought began by rending the very thinker himself. If indeed this world were a house divided against itself in such wise that within it one desired war, another peace, then the manner of its fall were easily foreseen, as these two fought their difference to the death of all but one. Or if it were a world wherein all desired war and all desired peace but sought to alternate the *times*, then in endless rhythm we could see its epochs developing, evolving new weapons, progressing not at all. But conceive the truth to be (what our education must have taught us) that in this distracted humanity of ours all desire war, all desire peace, all desire both at once and always! Then may our new philosopher venture on the scene, as once my mind's eye saw him.——

"His cheerful gospel is that all men's ills are curable by taking thought, that men suffer only for their false philosophy. Now, of all philosophies none is so false as that which pretends one cannot have his penny and his cake. True it may be in the letter that I cannot keep a certain copper in my pocket and honestly entice a sweetmeat out of the baker's window. But I must be a sorry philosopher if I cannot keep all the potentiality of future enjoyment the penny stands for, and yet have all the actual satisfaction I happen for the moment to visualize in the form of cake. Or to put the thought in less poetic and more general terms, the heart that thinks itself torn by conflicting desires owes its plight to the failure of its imagination to realize that only the formulas in which it has so far expressed its desires are in contradiction; the desires themselves may well enough be reconciled in a larger world-view.

[1] *Modern Thinkers*, "Progress," English edition (Harrap).

"Take our present problem for example. It is impossible, you say, that I should deny the ambition to conquer for the sake of the love of my neighbour without killing what is most vital in myself. And it is equally impossible that I should give play to my ambition to conquer without losing my neighbour's love and living a lonely struggle. These things are indeed impossible in the world to which the imagination of the past has been fettered—this little finite earth the fulness whereof is so easily emptied. If to have all that I can win of such meagre fulness is the only meaning I can give to ambition, either I must kill ambition and love my neighbour across a fence, or I must tear down the fence and kill my neighbour. But what if the fault of all this lay not with the darkness of reality, but with the blindness of untrained imagination? What if we could set before ambition a boundless prospect, so that never, far as conquest might reach, could it find cause to weep for lack of more to conquer? What if, in the very conquering of such a world, the gain of one, so far from being another's loss, were the equal spoil of all; yes, and a weapon forged to the hand of all for new victories? Wherefore *then* should ambition yield or love be denied?

"But perhaps you will say this *is* but an imagining and a dream. Our humdrum world, the only real one, offers no such object of ambition; and if it did, our nature, just human nature, is not such as could understand, still less be fascinated and inspired by it.

"Does it sound ridiculous to say that our world *is* one that holds out just such a prospect to all who will but see? Aye, and that many a human eye has seen, and having seen remained single to this vision? I will call the promised land the Kingdom of Nature Subdued: I will call the vision the Vision of Science."

But to philosophers, this vision is in principle too familiar to invite reproduction here; one question only of those to which it leads can be critical for us. One recalls how the spacious eloquence of Winwood Reade once projected man's development "from martyrdom to mastery," into a future almost too magnificent for prose; but does he really mean to say, can anyone mean to say, that the potential conquest of nature by science knows no limit at all? No individual now breathing expects to breathe

forever; and must not death forever put a term to life? Our solar system may well enough freeze to inanimation, or crash to annihilation; must not catastrophies of this order forever mock science's power to prevent? To these and all like questions (on the occasion here recalled) my philosopher's vision saw with Reade's and answered No. "Yes [he says] I know; the stars are rather big for our frail hands to play with even as all Nature once played with us. But how else am I to say that there is nothing [no *type* of thing] in Nature that can forever resist an onward march of science? What else am I to say when the same master equations hold in heaven as on the earth, and Arcturus with all his sons is but a falling pebble painted large?"

In no sense would our philosopher see in this famous "conquest of nature" a definition of that progress which justifies its goal. Such conquest can bring us (as Kant might have said) but hypothetical goods: good if the end be good. But in the search for a categorical good this "vision of science," though it define nothing, plays a most important rôle: it establishes a "universe" within which definition is possible; it offers a world-setting in which may be solved a hitherto insoluble problem, a problem whose solution *is* a definition of *the good*. This problem, already suggested, may now be formally worded: "How construct a world inhabited by many wills, in which each will pursuing its utmost desire shall to the utmost serve each other doing the same?"

As two small children of men, quarrelling over a penny, if warned that the ground whereon they fought was the entry to a treasure, would forget their penny-issue to help each other gather, so we, turned from cramped old world-views to live in the vision of science, must change our ways toward one another. In this new world wherein no manner of goodness can stand in permanent rebuke of desire, what real good there is must be that which leads to *the better*: wherewith the whole conception of goodness melts into that of progress. This progress may best define itself in terms of a definite measure, the measure of life's solution of the problem set by history, the measure in which wills shall have learned neither to deny themselves, nor yet deny each other.

By some such steps as these the "cheerful philosopher" of my

vision was led to his final sentence, wherein progress is defined and measured by *the measure*:

(1) *of man's cooperation with man*
(2) *in the conquest of nature.*

IV

To have gathered long lessons of history in support of what new hopefulness their very discouragements encourage; then, having no more than presented this careful structure, to abandon it to its fate—this may seem a strange procedure. Strange, yes, and none too willing; for it must have been pleasant to linger with a moment of satisfaction before hurrying on to its sequel of discontent. But this is the story of a questioner whose life lies not in its pauses but in its motives of unrest—let his biographer, then, tell only of these. Nor, recalling the object of his quest, can these be far to seek; for there are motives enough in history, and no less felt in life, which would lead one to question the right of his "life of progress" to be called a *religious* life. Of these, the particular motive most disturbing our philosopher may not be at all the one coming first to the mind of the reader. It is not, for example, a fear lest this life could know no "heaven" to which its faithful might aspire; no more is it a doubt as to the manner and measure of their "heavenly reward"; least of all is it a hesitation as to the order of their "devotions." These are none of his fears, but rather among those satisfactions his story might not linger on; yet which, since they are brief, may have such mention here as will serve to explain their sequel.

First, as to the ordering of this "blessed life": He who knows the laboratory of science and the atelier of art has at hand a model (small and imperfect, to be sure) of a progressive world. Here indeed every ambition as it is fulfilled lays its triumph at every other's feet. Need one show in what measure discovery aids discovery, invention multiplies invention, art inspires art, and collaboration increases all? Yet here individualism may reign supreme; for what should duty find to bind, where each is self-bound to the common goal? In its leisures, this laborious house

is a very Abbaye de Thélème, wherein scientist turns to artist for the refreshment of his soul; artist to scientist for the machinery of his ease. Their only common rule, "fais ce que voudras"; for where none can hamper any in any main ambition, who would control in his neighbour the spontaneities of taste, individualities of view-point, a fancy in selecting his personal share of the spoils? Need I say, the laboratory and atelier here depicted exist nowhere on earth as yet? But what of such workshops do exist come nearer to housing the ideal than does any other house built with hands. Of course, to accommodate all contributing lives our picture must be made quite roomy; and to house all that could if they would contribute, our shop must be built as wide as the world. It will then *be* "the world of progress."

There has been mention of "one's share in the spoils"; yet none who know the life-of-progress will suppose these bits of daily bread to constitute its "beatitudes." But just as our physiology gives us a sense of motion, so our psychology knows a sense of progress (or let me take this a little for granted)—"participation," some have called it, and felt they knew well what they meant. This sense becomes with reflection a clearer and clearer perception of the whole mental life, a knowledge of the moment's communion with the whole—or rather with the goal to which each well-directed moment tends. Those who know it (and who should know it better than the devoted philosopher), value this communion above all other values; it is for them their "heavenly reward." "Reward," do I say? A subtler mind has said better: truly this *beatitudo* "non est virtutis *præmium*, sed ipsa virtus."[1] Yet if this be the saying of a subtle mind, can none but the subtle experience its meaning? The like of this question has been asked before, and particularly by one who in his religion treasured most its treasure of the humble. His quaint form of answer is of its time; I like it best as it stands—the more literal may adapt it—

> If bliss had lien in art or strength,
> None but the wise and strong had gainèd it;
> Where now by faith all arms are of a length,
> One size doth all conditions fit.[2]

[1] Spinoza, *Ethica*, V, Prop. 42. [2] George Herbert, *Poems*, "Faith."

But indeed this "Faith" is most empirically founded; and the scientist who "belongs to the ages," and the *diener* who "belongs to the shop," may equally feel and know they feel a common confidence of belonging.

But to what, you ask, *do* they belong? (Which returns me to the beginning of my "satisfactions," for I see I have recalled them backward.) They belong, I should answer, to what gives the life-of-progress some right to be called in ancient sense religious; namely, the "heaven" which defines it. For who gives to progress only such meaning as lies in approach to the ideal has in this very ideal found for the pilgrim his heaven. And but for a greater remoteness, this heaven that is an ideal would seem little different in aspect from such as in the past have gladdened the eye and filled the thought of men devout. That goal toward which is set our pilgrim's progress is, as truly as any heaven, "another world"; and if its walls are not as of jasper, yet they hold a desirable vision, a city such as might be called "the city of harmonious wills." To this city are bound all who are of its faith—"ad unum Deum tendentes, et ei uni *religantes* animas"—quite as Augustine would have had the religious "bound" to their goal.[1] Or if one were to seek a wording in which the remote ideal might make itself present as a voice, what better words could he find than such as once à Kempis heard; saying, "My son, I ought to be thy supreme and ultimate end, if thou desire to be truly blessed."[2]

But here my "satisfactions" end. It may be that one who has made of the ideal his Heaven and his God, will have thought out in new fashion much of what is anciently felt to reside in "Heaven"; but will his thought have overlooked nothing of what once was felt to lie deep in "God"? At least on one point let our philosopher not deceive himself: he who ties his life to an ideal may be religious with all the thought of a Plato or a Boethius; yet can he not be religious with all the feeling of an Augustine or an à Kempis. Though he call his heaven *Deus*, though his ideal speak as *I*, though he address the universe as *Thou*, yet can he do none of these things without conscious poesy. But surely he will not pretend

[1] St. Augustine, *De vera religione*, 55; *Retractationes*, I, 13.
[2] *Imitation*, iii, 9.

Christian thought to have been poetic—not pretend it to have been anything less than as literal as it knew how to be in letting its religious discourse be of *I*, *Thou*, and *He*? "It is the essential feature [writes a very sound historian] of the Christian conception of the world that it regards the person and the relation of persons to one another as the essence of reality."[1] And will a "religion" have lost nothing but imaginings of the fathers, when, however it may have affirmed man's bond to heaven, it has let slip from its care the bond of man to man?

In songs of wine and love, in songs of the Open Road, lay suspicions of meaning which when followed led to the depths; and in the language of hymns, and in the language of prayers, shall there be no suspicion of heights?

V

Thus are we come to those present questionings, to that "lively discontent in all that has gone before," to which the first pages of this story pointed as the burden of its last. True, this unrest, could it offer no reason for its being other than an unreasoned confidence in the depth of historic insights, might communicate itself to few. Few would assume that every strong suspicion history has entertained must find confirmation among the maturities of thought; few would pretend that every "demand of the heart" for being strong and old must therefore be genuine and undeceived. No doubt humanity will have dreamt its vivid dreams, suffered its persistent delusions; and perhaps nowhere more than in its religious consolations has it been the victim of "other worlds" born only of dreamers' hunger and desire. But when this hunger and desire is as deep in the present as in the past; when it is so part of one's self and one's familiar kind, that had no historic religion taken it to heart, yet might no future religion ignore it; when, in short, it is the clutching of mortal for fellow-mortal—then indeed an ideal to which personalities are nothing can hardly pass unquestioned for a religion. Not at least with us, for in these pages (it must by now have

[1] Windelband, *History of Philosophy*, tr. Tufts, 238.

become clear) "religion" has had no other definition than the acknowledgment of some end in whose pursuit all desires are fulfilled. For one who so defines, an "austere" religion is none.

And so, of this old division between allegiance to things eternal and attachment to things ephemeral, how willingly would our "idealist" hope it might be mended by old devices! Is it not, after all, but a dilemma in the manner of all dilemmas wherein pennies vie with cakes and cakes with pennies? But a thousand experiences of life show how cake may be had and penny held for no more than a little thought on ways of having and holding. It was even by thus enlarging the "universe of possibilities" within which our thought might move that we brought under one ideal the demand for spoils unyielded and the demand for friendship held. Why not, then, set ourselves anew to the stretching of boundaries, till they shall have touched those generosities within which aspiration and attachment are equally at home? But alas, the imagination of him whose education these pages recall, has reached its limit; in stretching the world of its contemplation to make room for that last "vision of science" it has exhausted all it knows of its own elasticities. Wherefore, so far as it is concerned, if a world is to be thought of wherein (what have sometimes been called) "love of God" and "love of neighbour" are at one, this can be no "other world"—no other than the very one to which it last came and to which it feels itself confined. Hence the anxiety of its questionings!

But indeed, any who would know whether eternities and fleeting loves may be held in one desire has a right to his anxieties, if aught depend for him on wringing from ancient experience an affirmative advice. History is at one in its negative; divided only on the matter of which to choose and which to lose. Plato and Catullus are at one: "Ideals *or* Lesbias, not both." Only, then, Plato elects for the eternal Idea, rejecting other loves with their tortures. While Catullus, poor worldling, clings to this very torture (*odi*, he cries, *et amo*); for what so hurts is real as for him nothing else can be. But this—one of these—is the history of all the world. Of *nearly* all the world; for I think history may hold one exception, one lonely being who seems to gather in a same

embrace the eternal and the fleeting. If of his wordless philosophy I have caught any suspicion, this may show in the sequel.

Meanwhile, with all the weight of history against it, how absurd must sound the suggestion that for man's advance along the way we have figured as "the heavenly" there is no condition more necessary than the one all reasoners have contemned—the attachment of person to person! Or if that be not the limit of absurdity, then perhaps this is (which might be called its converse); namely, that "to lose oneself in the moment" could have no other charm than such a charm as death has; but to have delight in the moment, one must be carried beyond it, beyond any "Verweile nur!" and on to a "Vergeh'!" But let these be the absurdities they seem, still do they bring to this winter of my discontent its first suspicion of spring; which though it prove deceptive may be a pleasanter deception to unfold than any other I might have chosen as end for this unended story. Let me unfold it, then, as I can.

Or rather, only the first riddle, for of the second all will have guessed the answer. Is there indeed any moment of joy to which one will say "Depart!" save a moment made joyful by its *promise*? But if here there is neither room nor need to expand this commonplace reflection, yet it seems wise not to have left it unnoticed. For in a sequel suggesting the dependence of progress (i.e. of the *promise* of life) on attachment to things of the moment, our thought might have come to lack balance had it allowed to escape it the equal force of the converse: no moment can hope to attach us, save a moment of promise.

And so, only of the first of our absurdities; only of that attachment to perishing things which, though it boast its spendthrift waste, must in just the measure of its genuine being, consent to serve the eternal!—— It is generally admitted that for any manner of thing to be made, the matter it is to be made of is of importance to the maker. "The artist must know his medium"; yes, but how much vaguer than paint and vaster than canvas must this medium be, if with the colourings of his soul he would colour the souls of men. Just so with that other artist, whom I imagine we may call "the religious," and who would form the

common clay of which he and his fellows are made closer to a likeness of "the children of God." No doubt as a conqueror of nature, he is but a laboratory soldier serving with others like himself in the cold technique of science; and as with all soldiers the world over, when he falls his place in the ranks is taken by another, his function is continued, the disappearance of his person is nothing to *the cause*. So much, then, of progress as depends on subduing the mechanism of things to the manifold desires of men is no respecter of persons. But he who supposes the progress here defined to be no more than this conquest of nature, has missed our imperfect warnings; yet he may now recall progress to have been first of all measured by "the measure of man's cooperation with man." Of course, all cooperation must be *in* something; and the last clause of our definition does no more than specify that the cooperation measuring progress shall be *in* the conquest of nature. For his part in this collaboration your religious artist must know (or help him who knows) his instrument of exact science, just as painter must know pigments, brush, and surface. But must he not also know, just as the painter must know, the humanity on which he need work if he would persuade *it* to work —in harmony? Now that humanity in himself and others is heir to the warfare of "evolution": it is a most recalcitrant medium. How, then, should that part of the religious task wherein man is artist and medium of art dispense with any least bit of "worldly wisdom"? Never can it be furthered by the aloof; it is the work of *the knower of men*. But now, this knower of men—what manner of man is he?

Whether it be comic or tragic, it is always a stupid deception to suppose knowledge of men to be gathered from statistical study of (what is called) *humanity*. The humanitarian who cares for "cases," who measures his benefits in numbers, is a follower of that "cold statistical Christ" all human feeling mocks at. Quite other must have been that Friend of Man one feels back of all history; that "lonely being" whose wordless philosophy may have illumined these last pages with what dim light shows through them. Nor is this the Man of Sorrows whom Schopenhauer had accepted; for to know men with that knowledge which alone

can help the religious artist in his art is not to feel through sympathy that in which all men are one, but to divine (through quite another organ of understanding) that in which all men differ and are forever held apart. This it is whose presence in reality makes "the person" to be of its "essence"; this it is we figure forth as "the personal point of view"; this it is makes the world look and feel one thing to you, another to me, the same to no two that ever were or shall be. It comprises all that unsharable loneliness in which the heart knoweth his own bitterness and by which the stranger is excluded from his joy. To penetrate to the heart of this individuality and never to ignore what is learned there; to keep individuals apart in understanding that they may be brought together in will—this is the knowledge of his medium without which your religious artist can be no great composer of the harmonies he dreams.

But since, you say, this individuality into whose interior understanding is invited, is exactly that loneliness in which the stranger doth not intermeddle, how shall the stranger enter? To be sure, the stranger may *not* enter there; the classifying humanitarian may not; only the friend and lover may. And only he, by virtue of no mere kindliness and inclination, but by strength of that attachment which makes its object irreplaceable, unique in the lover's world even as in its own; and only then, by the virtue of whatever genius it is lets one "love another as oneself." Such love, alone in all this world, has learned to say *Thou* to anything this world contains; such love alone, as all the world knows, has learned the language which has no tongue—to it alone can be delivered the secret which has no words. So (as nearly as our poor language reaches to describe a common enough experience) may "other worlds" be delivered to an understanding capable of seizing them. Naturally, a world so without double can be described in no generalities of speech; yet it is exactly of such incommunicable worlds *the world* consists. "The world"? That is, the very same "universe of discourse" in which was set the problem of progress. It is, then, in this world (which truly is not far from us) that any real aspiration toward the eternal must not only consist with but depend on real attachment to the ephemeral.

It may well be, then, that progressive lives, "ad unum Deum tendentes," will hardly be able to put their thought into deeds without feeling the depth of that "wordless philosophy," that philosophy Erasmus calls the *philosophia Christi*, that philosophy whose followers came to "regard the person and the relation of persons to one another as the essence of reality." For if not in the way here suggested, then in some other way this philosophy held in one embrace the eternal and the fleeting; and no less than this must any philosophy effect, that would make a religion of progress.

"If this be mysticism," I catch myself answering that part of me which stands guard against such treacheries of thought, "if this be treason, make the most of it!" But why should it be? Granted the genius for that "love which individuates" (as Royce so well characterizes the personal feeling we have here in mind)—granted this genius to be beyond all learning; yet is it so *only in its practice*. Its sudden seizing on things before they shall have vanished even as all life vanishes, *that* cannot be learned; that cannot be learned *in time*. But in after-thought, in late after-thought, is there not room for *this* reflection: Throughout the slow growth of science and of articulate discourse, just such incommunicable view-points as have been occupying our thought have painfully found a way to compose their independent findings into one space-time world: and shall the lonely griefs and joys of men for ever remain a pluralistic universe? Will they, if thought and will are bent in common religious interest on making this universe *one*?

PRINCIPAL PUBLICATIONS

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NATURE AND MIND

By CHARLES AUGUSTUS STRONG

Born 1862; Formerly Professor of Psychology, Columbia University, New York.

NATURE AND MIND

I AM the son of a Baptist minister conservative in his views, but admirable for energy, order, and exactness, and of a mother who joined keenness of vision with patience. In correcting the proofs of my father's work on theology I was so repelled by the unnaturalness of the suppositions which theologians made in order to reconcile the conflicting stories in the Gospels, that the foundations of my belief in Christianity began to crumble and I could not become a minister myself as I had intended. At about this time I had the good fortune to study under William James. The questions debated in his classes, beginning with the infinity of time and space, interested me so much that, free at last from a false position and able to follow my natural bent, I chose philosophy as a calling.

James was a finitist and looked to some form of idealism as an escape from the actual infinite. But I could not see how space could have limits, or time a beginning and an end. I submitted to him a paper maintaining their infinity; and I well remember how, when he returned it to me with the margins filled out with comments in the opposite sense in his beautiful handwriting, I felt at first like sinking through the floor; but on second thoughts came to the conclusion that I was right after all.

I had previously sat under a sturdy Scotchman, who proved the truth of Hamiltonian realism by pounding on the table. The mind, located in the nerves, he told us, came in contact with external matter and knew its existence directly. It occurred to me that the intervening cuticle must prevent the contact and knowledge from being absolutely direct; but, when I urged this difficulty, he told me not to ask silly, hair-splitting questions. This was my first glimpse of the problems of philosophy.

James was the most responsive and open-minded of teachers. Perplexed in his thinking, but simple, honest, and deeply interested himself, he was a cause of thought in his pupils. We read Locke, Berkeley, and Hume, and I heard his lectures on Herbert Spencer. The problem of perception unfolded itself before me. From the stimulating conversation of a friend I learned the importance in this connection of physiological and what I may call medical

considerations, and began to study anatomy and physiology. I turned for further light to psychology, and for a time looked at philosophical questions from a narrowly psychological point of view, ignoring the logical and epistemological refinements which, as I was later to learn, were necessary to their accurate solution. The relation of mind and body became my especial problem.

I studied in Berlin under Paulsen, whose sober, judicious mind seemed and seems to me still the model for a philosopher. Philosophy, to Paulsen, was completed science—"*das einheitliche System aller Wissenschaften.*" His panpsychism, derived from Fechner, promised an explanation of the connection of mind and body, to me still the only intelligible one. The key to their connection was to be found in perception, as I shall explain in a moment. At this time I held that the stuff of all things was "consciousness"—little suspecting the ambiguities hidden under that obscure word. My doctrine of perception was subjectivist: I said to myself that what we *mean* by an object is something possessing colour and other secondary qualities; and it was easy to show that these depend for their appearing on an intra-organic process. But I also believed in a real thing, of which the phenomenal object was the representative—a thing in itself: and, as the intra-organic process referred to was one taking place in this world of real things, supposed myself to have attained to a satisfactory realism. It was long before I became aware of the contradiction that may be said to lie in such a complete denial of the identity of phenomenon and thing in itself. The truth, I now think, is that phenomenal thing and real thing are always identical in the view of the naïve percipient and for his intent, but, in fact, are in some respects identical and in other respects not so, according as perception is veridical or erroneous.

My views at this period are contained in my first book, *Why the Mind has a Body*. I had the doubtful notion that it was desirable to make the title of a book convey its doctrine; and as the bodiliness of things was, on my theory, due wholly to perception—a thing which in itself is consciousness (or, as I should now say, something midway between mind and matter) appearing to the senses as material—I thought that my doctrine explained intelligibly the *why* of the connection. It did not, of course, explain why the psychical existent appearing as the brain is connected with the outlying existents that appear as the rest of the body. Every conception in that book—consciousness, perception, the relation of phenomenon to thing in itself—I have since subjected to revision and materially altered, as indeed was necessary; but in substance I still regard the solution offered as sound, and even know of no other suggested solution, alternative views seeming to me to consist in suppression of the problem.

I take some credit to myself for having changed my opinions in philosophy from time to time, and feel more respect for a philosopher who thinks differently to-day from what he did yesterday than for one whose position remains always the same. Of course when a man is right he does well to remain so. But the opinions even of philosophers are partly the result of circumstances, as is evident in my own case; and, to free oneself from the control of accident, discussion with men of other ways of thinking is requisite.

I have been singularly fortunate in the opponents with whom it has been my privilege to discuss philosophy; chief among whom—though I can hardly call him an opponent!—is Mr. Santayana. We were students together at Harvard and Berlin, and then for a time saw little of each other; but, meeting again in the middle years of life, we had long conversations about fundamental matters, and I owe it to these that the neglected logical side of philosophical problems was brought to my attention. At a certain date I had come to the conclusion that intelligent discussion of perception required the recognition of three categories: the object or existent thing, the subject or self, and the form in which the thing appears to the self. Santayana's conception of "essence" seemed to me to be the right definition of this form, this third category. I also made at this time a correction of my view as to the relation of phenomenon and thing in itself, a correction destined in time to free me from the fallacy of representationism. It consisted in recognising that, since the real thing is that concerning which perception brings knowledge, it, and not the phenomenon, is really entitled to be called the "object." The

phenomenon, in other words, is not an object, but only the form (perhaps correct, perhaps incorrect) in which the object appears. The thing in itself is thus no longer an unknowable—a *Ding an sich* in the bad sense—but is that which is known; and only capable of being known falsely as well as truly. These two changes mark an epoch in my thinking.

I had also come to perceive the ambiguity of the word "consciousness," and to see the need of distinguishing between awareness and the subject which is aware. James, with whom I had some useful discussions, now published his important article, "Does 'Consciousness' Exist?" I had never believed in a "Soul," distinct from the existent that appears as the body and antithetical to it in nature; and I readily agreed that awareness, if conceived as such an immaterial existent, is "the last faint breath left by the Soul." On the other hand, I could not accept James's view that the only consciousness or awareness we need recognise is the phenomenon re-baptised. For I considered that subject and object—whose relation, in perception, corresponds to that between the organism and a thing in its environment—are *two* existents and not one, and I held that each of these existents is, in its own nature, psychical rather than material. All existence is material as well as psychical, if by "material" you mean not in time only but also in space; but perception (being a view of an existent from without) does not show us what is the nature of the existents that occupy space, while introspection in my opinion does show us what is the nature of the self—namely, that it consists of feeling. The phenomenon arises by the use of feeling to bring before the subject the existence of objects; it is a product of a highly complicated situation occurring in the life of animals, and the last thing that can be properly looked to as constituting in its own being the stuff of which reality is made. And yet the phenomenon, in so far as it is veridical, correctly reveals the outlines of the external object.

While thus rejecting James's view of the unity of subject and object (if "object" means real thing) in the moment of perception, I heartily agreed with it in so far as it was a doctrine of the substantial unity of subject and *phenomenon*. For the phenomenon, as I have just explained, arises by a portion of the feelings constituting the subject being used to mirror real things external to him. James's view that in "experience" (if by that term we mean the subject's life, not his mirroring of objects) there is no inner duplicity, and that of this life feeling is the nature—thus dispensing with an entity which feels—seemed to me sound and an important advance; indeed, I had been led to it by my own thought. The neo-realistic doctrine that the subject is the object looked at from a new point of view, or taken in a different context, really expresses the same insight as my doctrine that phenomenon is produced by the use of the subject's life to mirror objects; but my doctrine avoids that attribution of existence to the phenomenon as such, that complete identification of the phenomenal with the real, which, I must hold, is the fallacy of neo-realism. In his *Psychology* James speaks of "an undertow drawing us back to the Soul": the soul to which I have been drawn back (or led forward) is one made of psychical atoms, which appear or might appear as the atoms of matter.

I want to take this opportunity of acknowledging my great indebtedness to James. From the first I felt the concrete, empirical quality of his mind, so different from the confident rationalism of his Hegelian colleagues; their views seemed in some respects more logical, but he was more cautious and alive to facts. It was only later that I awoke to the originality and vigour of his thought. I could never accept his pragmatism, nor one-half of his radical empiricism (the phenomenalistic side of it), nor his indeterminism. His "will to believe" still seems to me the makeshift of a mind not free from credulity. Yet it was from him (from his article in *Mind* on "The Function of Cognition") that I got my mechanical explanation of awareness—as a mirroring effected through behaviour, in a certain causal setting; from him or with his aid, the view that the core of the self lies in feeling, not in a Soul or in awareness; from him, encouragement to a pluralistic or—to use a term which I remember his quoting from Charles Peirce—*synechist* view of things.

Unfortunately James was too much under the spell of the Hegelism he detested and of the British philosophy in which he

had been brought up. Shadworth Hodgson had convinced him that things were "what they are experienced as being." The phrase covers a fatal confusion. True as it is that we can learn of existents only through experience, and are dependent on experience for our knowledge of what they are, to say that they *consist* of experience (ours, that is, not their own) is, in effect, to say that they exist by our seeing, hearing, and touching them. In truth, sight, hearing, and touch are, as Berkeley saw, a language which conveys the presence of things, but does not deliver them over bodily. In Santayana's apt phrase, perception is "a salutation, not an embrace." We are put in touch with reality by what he calls *intent*, not by an infallible intuition. The trouble with the empiricist philosophies now so much in vogue is that, when they analyse perception, they begin by dropping the intent.

What is intent? It is the inevitable implication of the active side of our nature, by which, when an object produces an impression on us, we are moved to behave not with reference to the impression, but to the object which is its cause. When a light strikes the eyes, they automatically direct themselves upon the source from which the light proceeds; and all the rest of the body follows suit. This direction upon an object—or "reference to an object," in the consecrated phrase—is the uniform characteristic of all our cognitive experiences; it depends on behaviour, or the readiness to behave; and the object upon which the experiences are directed is evidently distinct both from the experiences themselves (the impressions or sensations, that is, which it has produced in us) and from the use of these experiences to convey it, and only not distinct from that which we, who have the experiences, intend. The thing as experienced may *differ* from the thing as it is, if the impressions produced chance to be such as to convey the latter falsely (as in the case of projected after-images or of double vision), but what is experienced is always meant to be identical both in being and in quality with the real thing; and must be supposed really to be so to some extent, if we are ever to attain to knowledge at all. The assumption of their identity is what Santayana calls *animal faith*.

The strong point of current neo-realism is its insistence on the

necessity of this identity. But, owing to its lack of a satisfactory doctrine of consciousness—its ignorance of the manner in which phenomena are brought into being—it is led to deny, in the face of fact, that appearances can ever be erroneous, and to conceive perception, in the old naïve way, as infallible intuition of the real. This is the last faint breath, or rather, still strong breeze, left in the air of philosophy by British empiricism, with its doctrine that objects are "impressions" (not that which impresses), "sensations" (not the external source of sensations); and by German transcendental idealism, with its extravagant thesis that Nature (not our awareness of Nature) is a creation of thought. Kant was the eater of sour grapes when, instead of replying to Hume by pointing out the activity and consequent intent that underlies our cognitive experiences, he continued Hume's sceptical slumber by declaring that we cannot by means of our eyes, ears, and hands, or rather, of the trustful intent which the use of these implies, know the existence and nature of things outside our bodies. I say "outside our bodies," for the things that are there are also outside our minds.

The antidote to this error lies in seeing that there is no awareness or intuition except so far as the subject behaves as if there were a real thing, and so has intent. Doubt is psychologically secondary; it can arise only by a subsequent questioning of the intent and assertion in which we engage by instinct. The reply to Hume is that, unless one acts as if things were real, one has nothing before one's mind at all. The cases in which we repute things, such as winged horses, to be imaginary, or think of abstractions, such as virtue, are late artificial products, impossible except by the complex exercise of a function which, in its original use, involves the belief that objects seen and touched are real. But philosophers have imagined that knowing and acting were quite separate—that we could first barely contemplate without any bodily activity being involved in the contemplation, and then proceed to act. This is not the case. There is no knowledge without attention, and no attention without some sort of bodily response, which is what gives direction upon an object and converts mere feeling into awareness.

Philosophers would not have fallen into this error if they had concerned themselves less exclusively with knowing, and paid more attention to feeling and will. For in these we have states of mind which cannot be treated as mere data of intuition. How often do epistemologists seem to be looking at perception solely from the point of view of vision, and forgetting that the same real thing may be given at once in terms of sight, hearing, and touch! How rarely do they ask what is the nature of the occurrences in the nervous system with which knowing is immediately connected! Physiological psychology, to be sure, is a creation of the last sixty years, and Kant and Hume cannot be blamed for non-acquaintance with its results.

A word must now be said about introspection. A person seeing or hearing is usually aware only of the object seen or heard, and unaware that he sees or hears; yet at any moment he may become aware of this. Epistemologists often suppose that what he then becomes aware of is *his awareness*—that is, the relation of seeing or hearing between himself and the object. That this is not the correct account of the matter may be seen from the fact that, in becoming thus aware, he ceases wholly to be aware of the seen or heard object, and therefore cannot be aware of a relation or a cognitive function connecting him with it. As James has shown, there is no such datum of experience as awareness. Awareness is a functional relation between self and object inferred by the mind after the fact, and that can be inferred only when the self has already been cognised. What the introspecting person has really apprehended is *a state of himself*. He has become aware that the light or the sound is not merely an external object, but at the same time a mode of his own being. And he has learned this, not, as James supposed, by considering it in a different context, but by altering the direction of his attention so that the light or sound, which at first was viewed solely as an external object, is now viewed as internal to him and as a state of his being. What he has mistaken for awareness is the sentient or psychical nature of this state of himself. In this state, the *what* and the *that* stand on exactly the same footing: there is no awareness of one by the other—or, in James's phrase, no

inner duplicity. And when this state is projected outward and used to bring an external light or sound before him, there is again no inner duplicity, or at least subject-object relation, between its aspects: the quality is taken as the quality of the object, and the sentient being as the apparent being of the object.

Introspection, then, is self-awareness. It is made possible by a new direction of the attention, supervening upon the old sensuous matter; attention involves reaction, which is as necessary to awareness of the self as it is to awareness of external things; by behaving with reference to what is within our bodies we are enabled to take notice of the state by means of which we see or hear.

The existent of which we thus become aware is just as truly other than our awareness of it, and just as much brought before us by a phenomenon not necessarily coincident in all respects with the real thing known, as in the case of external perception. The feelings composing the self are not given to awareness merely by existing; visual sensations exist in us whenever we see, but what we are ordinarily aware of is not they but only the objects seen. The sensations become our objects only by our actively making them so. Thus I differ from most contemporary thinkers in holding that Kant was right in his belief in an "internal sense," however erroneously he may have conceived it. Introspection lost its credit with philosophers only as a result of the general substitution of phenomena for real things, of the transcendental for the transcendent; and a thoroughgoing realism should recognise introspection and apply realistic principles to it, among these the distinction of the real and the phenomenal, no less than to perception.

A philosopher so full of animal faith and so generous in the assumption of reals as I am is bound to give an answer to the ultimate question concerning all knowing, namely, this: What security have we that, in any case whatever, the real thing is as it is experienced as being? To this question I have a special and a general answer. The general answer is that, as we know only by animal faith *that* anything exists, so we can know *what* things are only by the exercise of more animal faith. If you haven't

it in you to exercise animal faith, cease to know altogether. But then do not philosophise. For myself, my animal faith is so great that I feel perfectly sure that all existents are in space as well as in time. I do not think that they are coloured, because physics g ves a colourless account of the nature of the different wave-lengths of light, and because psychologically I can conceive colour arising as a quality in phenomena through the "simplification" of psychical elements which have it not. As for those who, with Kant, imagine that external reality may be non-spatial and non-temporal, it may be said of them that if they had animal faith as a grain of mustard-seed they would not try to remove mountains.

The special answer is a complex deduction from the whole of the preceding theory. According to this theory, phenomena arise through the use of psychical states as signs, and the real things must therefore be supposed to differ from one another much as their phenomenal presentments do. The phenomenal presentment of a psychical state, to perception, is an event in the nervous system; and nervous events differ so widely from events outside the body that such psychical states as visual sensations—even when modified by "projection"—cannot be supposed to reveal more than the true outlines of external things. In introspection, on the contrary, a psychical state is used as the sign of another just preceding psychical state (in phenomenal terms, a nervous event as the sign of another nervous event). In this case, accordingly, the real thing and the vehicle by means of which it is presented are alike. We may therefore reasonably assume that the nature which introspection shows us—namely, feeling—is the true nature of the existent cognised. The fact that in all our feelings, not in visual sensations only, traces of "extensity" are detectible confirms me in the belief that feeling, or something which by integration gives rise to it, is the reality that is spread out in space.

We are witnessing at present, as a result of the astonishingly successful labours of physicists, a substitution of the notion of energy for the traditional conception of matter. It is one of my greatest regrets that, owing to my small knowledge of mathematics,

I am unable to enter into the details of their reasoning and understand fully the processes by which such marvellous results have been reached. I am obliged here to fall back on authority; and I confess to a certain satisfaction in finding that better qualified thinkers, such as Bergson and Whitehead, consider Einstein's presumably correct mathematics to be capable of an interpretation more in harmony with common-sense ideas of space and time, and that so profound a physicist as Larmor declares Newtonian time to be essential to astronomy—so that we need not, as at present advised, regard a universal cosmic time as an exploded superstition, or cease to believe in a strict simultaneity between events distant from each other in space.

Panpsychism would, of course, be a futile philosophy if it were inconsistent with these great advances in physics. But the contrary, I think, is the case. Since physics has abandoned the conception of matter as ultimate and substituted for it that of energy, without professing to explain what energy is in itself, and since the progress of my own thought has led me to discard my early notion that the stuff of things is "consciousness" and to conceive feelings as not even necessarily coincident with the data of introspection, it seems to me that physics and my philosophy have been approaching the truth from opposite sides. I remember how inept it seemed to me, in the early days, of Spencer to derive consciousness from purely physical being by saying that it first became "nascent" and then effectively real. I still believe that one cannot get feelings by a continuous process out of energy unless one conceives energy in a very particular way; yet my fundamental conviction is that all things, even consciousness, do arise by continuous process, and I think that the evolution of mind out of the apparently non-mental is a problem which philosophers must now take in hand.

My epistemology, it will be seen, is a combination of sen sationalism with behaviourism. Behaviourism without feeling seems to me ridiculous (does anybody really hold it?), and sensationalism has been often enough denounced; but, together, I believe them capable of giving a satisfactory explanation of the psychology of knowing. The view of knowing to which they lead

is such that what appears to us as material may quite well, in itself, be sentience, or a raw material out of which animal sentience is made.

But how, the reader unaccustomed to the paradoxes of philosophy may ask, can we possibly believe that mountains, and white-hot stars, and the electrons of physics, are one and all made of feeling? The answer is (1) that feeling, as it exists in human beings, is a tremendously complex integration of elementary units, permitting them to mirror external things and one another for the better regulation of conduct; (2) that the first essential of a sound psychology is to distinguish between *phenomena*, which are creations of intent, and among which feelings appear when they are made objects of awareness, and *feelings themselves*, such as exist in us when we see or hear and are lost in the object—which latter are states of the self, and no more self-transcendent in their own nature than nervous processes are; (3) that, since careful introspection reveals traces of spatiality in our feelings, these must be composed of parts, and may be composed of parts *ad infinitum*; (4) that these parts (like the nervous parts that reveal them to the eye) are *active* in their nature—since feelings do in fact prompt to action—and thus as truly forces as the existents in the physical world. I can accept Professor Montague's thesis that consciousness is the same thing as potential energy, if by "consciousness" be meant feelings divorced from awareness.

Thus I share the view of Leibniz that the only point at which we have what amounts to intuition of real being, and are able truly to apprehend its nature, is in our introspective knowledge of ourselves. I do not, to be sure, agree with Leibniz that the characteristics we find real being to possess are perception and appetition, or that it consists of monads. I think that its characteristics are feeling and impulse, and that it consists of what he calls metaphysical points. Unscientific views of the mind inevitably led earlier philosophers to exalt its functions and unity, to the neglect of the simple elements on which these functions and this functional unity depend.

Of late I have occupied myself again with the question that first

attracted me—the infinity of time and space—in the endeavour to understand the nature of continuity. Logicians would perhaps have been more likely to reach sound views in this matter if they had considered first the continuity of time, and not allowed their analysis to be deflected by prior consideration of space. Time must be so conceived as to provide a real *present*. Philosophers have been singularly neglectful, I think, in not supplying us with a tenable account of this primary fact. They too often suppose that the present can be a little bit of duration. The most extravagant conclusions are drawn from this view as a premiss—as that the past is equally real with the present, and the future, in comparison with the past, wholly unreal. But every duration is composed of parts, which follow each other in succession, and cannot be the present together but only separately. It follows that *no* duration, however short, can be the present—that the present can only be an instant. This was quite clear to Leibniz.

But an instant, it will be replied, is a nothing of time, and can contain no reality. This is an error. It is a nothing only of *duration*, and can contain no *change*; but change is not reality—it is the passage from one state of reality to another. Nothing ever exists but the states. Change is, in its essence, always either prospective or retrospective.

There is no possible doubt as to the conclusion that must be drawn. *Time is composed of instants*. It is the infinite number of these that give to it duration.

The parallel argument in regard to space shows it to be composed of points. Let me state this argument. Whatever exists must be some*where*. But every extension is a multiplicity of wheres; when you look into it, you find it to consist of parts *ad infinitum*. A simple where, a single place, must be one not consisting of parts—and this can only be a point.

What becomes, on this analysis, of the relations which join points into extension, instants into duration?

Time and space are not existent frames that can be objectively without having anything in them: they are the most general orders in which existents are arranged. These existents reside in points, at instants. Change is the rearrangement of these meta-

physical units (if units they be) occurring from instant to instant. It does not occur *between* the instants—as it were, in an intervening time; the ultimate fact is the annihilation of one instant, or rather of the arrangement of units in it, and the immediate creation of another instant in which the units are differently arranged; which latter, because it is born out of the former, is the *next* instant. Thus there is something that lies deeper, or nearer to the substance of things, than time; and that is causality. Causality is the necessity, in reality existing at an instant, by which it gives birth to reality at the next instant.

For the sake of simplicity I have spoken in the preceding of what exists in a point as a "unit." But, with the substitution of the conception of energy for that of matter, it becomes possible that what resides in a point at an instant is not a simple unit, but a variable amount of energy. The units of energy, if such there be, may not be impenetrable to each other. In this way "fields of force" with varying levels would arise. The physical world would not be either a plenum or a partial vacuum, but would be more or less full at different points and in different regions. Newton thought that the interstellar spaces were very full indeed, and "fed" the sun and the stars; this was his guess as to the cause of gravitation. Tension or intensity, if the present notion is correct, would be a fourth dimension in the instant, additional to the three spatial dimensions. This seems to permit an answer to the obvious objection to my doctrine of time as composed of instants, that the instant affords no room for velocity, acceleration, and momentum. These may exist in the instant in the form of the relative height of different waves, and the ultimate solution of physical problems may be furnished by wave-mechanics.

Continuity, both temporal and spatial, depends, according to this analysis, on the causal relations by which adjacent reals co-operate to produce the redistribution of energy at the next instant. Energy is conserved, and there is therefore an identity of the energies in successive instants, at least as to quantity. It is important now to take note of the negative as well as of the positive side of continuity. The connection between

adjoining portions of energy, by which they are able to co-operate and modify each other's position at the next instant, is balanced by a complete absence of connection between portions of energy at a distance from each other, and by a complete inability on their part to affect each other causally. All causal action proceeds by spatial and temporal continuity. Newton, Clerk Maxwell, and Einstein agree that there is no such thing as action at a distance.

Moreover, the subdivision of energies is infinitely fine, and there is no place too small for action to proceed from it—not even an inextended point. This enables us to admit a measure of truth in Leibniz's theory that space and time are subjective. If all action proceeds ultimately from points (though with more force from some points than from others), and if the only real connections in Nature are the causal relations by which the energies in adjacent points co-operate, either resisting or supporting each other, then Nature is a continuum but not a whole. This is the essential thesis of my synechism. Space and time as wholes, and the lesser wholes consisting of portions of space and time or what is in them, are one and all made by the mind, in so far as it considers things together which in Nature are disconnected.

The reader will now be able to perceive the true sense of my panpsychism. It is not the view that nothing exists but souls, nor is it the view that nothing exists but awareness; it is only the view that if energy were not in its own being soulful, or capable of awareness, no such things as minds could ever arise. This is only a revised materialism, if you like; at least, it is as near as I can come to the truth of things.

Nor is it inconsistent with a belief in "spirit," as the writings of Mr. Santayana show. Spirit is that supersensible function, dependent on sensation and behaviour, by which we contemplate the past and the future, the absent as well as the present, the feelings and acts of our fellow-men and likewise our own, and perceive (or are capable of perceiving) all things in their true relations. Spirit, as James says of consciousness, though nonexistent as an entity, is very real as a function. And the relations it perceives may be not the less true because they are reached by summation of the immediate connections which alone are

present in Nature. The unity of apprehension is a functional unity, arising through the use of feelings as signs, and not justifying the inference of existential unity in the self. No philosopher who understands the meanings of words can deny the reality and importance of spirit. *Im Innern ist ein Universum auch.* . . .

What acts in us is not consciousness or awareness, which is only a mirroring of things external and internal, but the self, composed of feelings which (being identical in their substance with energy) are at the same time impulses. This makes it possible for a philosopher holding my views to be at once an interactionist and a parallelist. Parallelism is true, because the existent called self and its physical manifestation (to an anatomist looking on at the brain, or to you looking on at my body) never interact. Interactionism is true, because there is interaction between the self and the contiguous parts of the real world—the physiological processes, first of all, surrounding the brain-process. And, furthermore, even the much reprobated "conscious automaton theory" is true, since awareness is a supersensible relation, a function of intending and having to do with, which, not being an existent but only a function, is no more capable of producing physical effects than is my resemblance to my image in the glass. Yet, for all that, the self is efficacious.

In the short span allotted me for reflection I have paid but little attention to the higher logical questions, and made no systematic study of ethics and religion, because I felt that the problem of perception and that of the relation of mind and body were more fundamental, and that one's solution of these must largely determine one's attitude on the great cosmic questions. I will only say, as regards these, that it seems to me plain matter of fact that Nature is morally indifferent—caring not for our human goods and ills. On the other hand, of course Nature is far from tolerant of bad conduct; and even ordinary men are aware that wisdom—primary wisdom—lies in correctly knowing Nature's laws. Philosophy therefore is still on the side of the angels when it endeavours to establish, on solid grounds, that Nature is real and knowable.

The ground of morality, I am convinced, lies not in Nature

but in human nature. At most times we are but half awake—failing to enter imaginatively and fully into the events about us, to read the feelings of other people, to foresee the consequences of our own acts: in a word, to perceive our circumstances in their truth. But moments come when the veil is lifted, and the human drama stands before our inner vision with more completeness. Religion consists in living as nearly as possible in this sense of the reality of things. It is independent of any view as to the nature of the world.

There is another, but not lower, wisdom which lies in correctly knowing the laws of human nature; and if I had another life to live, I would gladly devote myself to acquiring more of this second kind of wisdom.

PRINCIPAL PUBLICATIONS

Why the Mind has a Body (1903).
The Origin of Consciousness (1918).
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WHAT I BELIEVE

By JAMES HAYDEN TUFTS

Born 1862; Professor of Philosophy, The University of Chicago.

WHAT I BELIEVE

My generation has seen the passing of systems of thought which had reigned since Augustine. The conception of the world as a kingdom ruled by God, subject to his laws and their penalties, which had been undisturbed by the Protestant Reformation, has dissolved. We watch the process, but as yet are scarcely awake to its possible outcome. The sanctions of our inherited morality have gone. Principles and standards which had stood for nearly two thousand years are questioned. The process goes on among us in methods which are perhaps no less radical because they are not violent. In Russia the change is both radical and violent. It is seen at work in our great institutions of law, politics, business, industry, and philanthropy. To understand and interpret the origins of moral life and the complex relationships between moral ideas and the great social institutions has seemed to me a fascinating field of work. I began my work in philosophy with studies in its history. I changed to ethics because, as I came to gain a clearer view of the important tendencies of the time, I thought the ethical changes the most significant.

I was born and received my early education in western Massachusetts. My ancestry along all its various lines, with the exception of the paternal Tufts strain, had come to Massachusetts in the Puritan migration of 1630 or shortly afterwards. My great-great-grandfather, John Tufts, had come to western Massachusetts in the considerable company of Scotch-Irish about a hundred years later. One of the emigrant ancestors, the Reverend Ralph Wheelock, is said to have been enrolled in Clare College, Cambridge; but with this exception all my ancestors in both lines were farmers until my grandfather, James Tufts, went to Brown University (then Providence College) as a preparation for the ministry, graduating in 1789; and my maternal grandfather fitted himself for the practice of medicine by attendance upon lectures in Dartmouth College. Both settled in a pioneer town of southern Vermont, high on the Green Mountains. My clerical ancestor remained in this, his first parish, until his death, and in accord with what seems to have been a not uncommon usage, was

known as "Priest" Tufts through all the county, and indeed beyond. He was in his theology a follower of Nathaniel Emmons, with whom he had studied after graduation from college. It was a stern doctrine which he preached; yet for forty years he was a commanding influence as the spiritual ruler of the community. Very probably it was the ambition of the alert-planning mother, who was quite as influential in family decisions as the more formally educated father, that encouraged the second James Tufts, my father, to set out from home across the mountain, forty miles on foot, his outfit in a small satchel, to begin preparation for Yale College. My father never lost the atmosphere of this Green Mountain town in which the church was the centre and circumference of the community life, and in which no one thought of questioning the minister's declaration of the counsels of God. The Yale College of that day was a group of very serious young men, many of them expecting to enter the ministry. The atmosphere of the parsonage was repeated in New Haven and further found in Andover Theological Seminary, to which my father went from Yale. Sudden loss of voice prevented my father from preaching as he had intended, but he maintained throughout his long life his theological interest, and this was an element in the environment of my early years.

My father was fond of discussion. On week days the morning newspaper, on Sunday the subjects of the morning sermon were invariably discussed, and the boys of our family were expected to remember at least the minister's text and to state the principal "heads" of the discourse.

My mother was also an important influence in my education, although during the formative years of my childhood she was a nearly helpless invalid. She had received a good education according to the standards of that day for women, and had been a successful teacher previous to her marriage. She had inherited from both father and mother a refinement of spirit; her religious experience of conversion had given scope and purpose to her life. To meet her ambitions and standards was a goal to be striven for.

My early education was of a somewhat irregular sort. After my father had remained for some years without definite occupation,

owing to the loss of his voice, he was induced by his old college friend to become principal of one of the New England academies. After a few years he resigned from this position and took into his home a small number of boys for private instruction. Some of these boys were fitting for college, and my own preparation was hitched on somewhat casually to the work which chanced to be under way. If a boy came along who wished to begin algebra, I began or reviewed algebra, and when other boys began Latin or Greek, I formed one of the beginning class in that subject. My father was an excellent drill master, and I had thorough preparation in the classics with a minimum of hours devoted to study. It was a relatively easy and enjoyable journey that I traversed through Caesar and Cicero and Virgil, Xenophon and Homer. At fourteen I had covered the ground prescribed for college entrance, although in many other lines my education was grossly deficient.

Meanwhile, I was getting another sort of education for which I have always been thankful. My father's homestead included a small farm whose dairy and garden supplied the family table with a large share of what hungry boys ate and drank. The manual labour was in the charge of a capable hired man, but there seemed to be a large amount of work which was within the powers and duties of a boy. In the winter, the care of the cattle after the morning's milking; in the summer, the work of planting and haying and harvesting—all offered strength and health and fellowship with other workers. From being a rather delicate young child I became well and strong. I acquired a constitution that knew little fatigue and seemingly no limits of endurance, during my years of study and early teaching. What was, perhaps, almost equally valuable was my acquaintance with the point of view of the man who works with his hands, and my ability to meet many sorts and conditions of men on common terms. During the four years after I had traversed the preparatory studies for admission to college, and before the actual date of my entrance upon my college course, I had read a considerable amount of history, had reviewed and extended my reading of the classics, and had (unwisely) taught a district school for two years. I had also

become a member of the Congregational Church. So far as I can recall, I accepted even the somewhat comprehensive creed. While I do not think that doctrines relating to the future life occupied relatively a large part in actual worship and preaching, I presume that if asked I should have given them assent. At eighteen I entered college and a new stage of my intellectual life began.

The New England college of those days has now completely vanished. The curriculum, indeed, had been partially liberalized by the introduction of a considerable number of elective courses. But the spirit of the college remained much as it had been in the days of its founders, sixty years earlier. We studied the Classics, mathematics, the basal natural sciences, the modern languages and literatures. In the senior year, all students had the course in philosophy. But the outstanding feature of the college, as I now picture its atmosphere and its influence, was the religious seriousness. The impressive figure of President Seelye made morning chapel and Sunday church service the most characteristic exercises of the week. I elected typical courses in language, literature, natural science, and philosophy. Professor Garman began his work as teacher in our freshman year, as our instructor in mathematics. In our senior year he taught us philosophy, but he had not yet worked out the course which gave him such a conspicuous position among American teachers of philosophy. Yet even so, his sympathetic grasp of the undergraduates' somewhat bewildered state of mind in traversing Hickok's texts and his illumination of the deeper issues in religion and society left a leaven at work.

A conviction of the influence of ideas was one of the chief reasons for the selection of a career. The atmosphere of my home was almost compelling. I recall vividly my mother's report of a conversation which she had with the mother of a classmate at the time of my graduation from college. The two mothers were comparing notes as to the plans and prospects of their sons. The mother of the classmate said, "I don't know what X will do, but his mind is filled with plans for making money." She spoke in a tone of disappointment, and my mother repeated the conversation as though such disappointment was the most natural thing in

the world. For women of their antecedents some professional career was the only thinkable line of work. I had never discussed seriously the question of a career, but my own interest in this case coincided with the expectations of my parents. My father, although he had himself expected to enter the ministry, until loss of health compelled him to change to the allied profession of teaching, was more scrupulous than might have been expected in attempting to influence my choice, although I knew he would be greatly disappointed if I did not choose a career which had in it the opportunity for useful work of some sort. In the Amherst College of the 'eighties a transition was in progress. Until that period a large proportion of the able students among the graduates had entered the ministry. In the 'eighties and 'nineties the profession of college or university teacher began to be increasingly effective. President Seelye and Professor Garman did much to encourage this tendency. President Seelye spoke frequently and with pride of the numbers of Amherst men upon the faculty of Columbia and of the recently organized Johns Hopkins. It was the conviction of President Seelye and Professor Garman that in the days of transition in religious and political views which was then in progress, the opportunity of the thoroughly trained teacher was greatest of all. He seemed to embody in concrete form the power of ideas. It was hard for one who had passed four years in the study of ideas and their relationships to life and institutions to think in any other terms than in those of the opportunity for influence thus afforded. Reports reached us, through Garman's course, of new industrial organizations, of the beginnings of the struggle of the Government with corporate wealth. But to all except a few of the students of the college these reports seemed to be from a world which did not concern us. If we took them seriously we thought of our function in society as that of understanding and discussing rather than of actually plunging into the world of affairs. At any rate, to understand what was going on and to teach young people seemed to many of us at that time one of the genuinely worth-while lines of effort.

Two years spent in the college as an instructor in mathematics helped to define my problem further. I was still somewhat hesitant

between teaching philosophy, as advised by President Seelye and Professor Garman on the one hand, and entering the ministry. During my college course I had taken an active part in student activities from football to debating. I enjoyed speaking to an audience, and thought it probable that the executive opportunities in the ministry might appeal to my interests in that direction. I entered Yale Divinity School with the question still undecided, and divided my time nearly equally between the divinity course, on the one hand, and studies in philosophy with Professor Ladd and anthropology under William G. Sumner on the other. It was an invitation from President Angell to become an instructor in the University of Michigan, coming in the summer after my graduation from the Divinity School, which was the decisive factor in my career. Henceforward I gave myself to the life of the scholar, although at intervals I have taken on administrative work as Dean of the Colleges; and when in 1925 President Burton, of the University of Chicago, felt the need of assistance in his large plans for a new creative epoch, I found a fascinating though extremely difficult field in the office of Vice-President.

The University of Michigan in 1889 was a stimulating place. President Angell was surrounded by a faculty comprising some of the older generation, and some men fresh from Johns Hopkins and other schools of graduate work. Many who have since achieved the highest eminence in their fields were then on the staff. The University was undoubtedly the most active centre of research west of the Alleghanies. Professor Dewey had already made himself known by his Psychology and his Leibniz. The tradition of philosophy, as this had been built by Professor George Morris, was that of a commanding and enriching subject. The ablest students elected it. A young instructor could have had no more favourable conditions.

But at Yale I had studied with Professor W. R. Harper and had been greatly impressed by his tireless energy and far-reaching ideas. When, therefore, he invited me to join the faculty which he was assembling for the new University of Chicago I reluctantly decided to leave my attractive position at Ann Arbor and to cast in my lot with the new enterprise. Believing that study in Europe

would be important for effective work in the new institution, I spent a year at Berlin and Freiburg, taking my doctor's degree at the latter university under Aloys Riehl with a thesis upon Kant's Teleology. My years of academic training had reached an end. I was eager to join the body of scholars which assembled on October 1, 1892, and with the exception of the year 1920–21, spent as visiting professor in Columbia University, I have continued in my position in the University of Chicago.

Stimulating and absorbing as it was to take part in the making of a new university, I can now see that this was, perhaps, less crucial for my development in the long run than the contacts with the City of Chicago, and the challenge to all my previous philosophy which the unaccustomed conflicts of forces presented. At the outset I devoted myself to the history of philosophy, and during the first year translated Windelband's *History*. But I began almost from the first to feel the impact of an environment very different from that of my New England scheme of the political and economic order. On the one hand, Chicago was then, and continued to be, a city of power. The centre of marketing, transportation, finance, for the great Middle West, it had been a school for forceful leaders. In the building of vast industries, of establishments for wholesale and retail trade, and of substantial banking organizations, it was a city of opportunity. It was a city still in the making, and with ambitions not limited by ordinary bounds. The beauty of its World's Fair augured well for its future support of a university.

Power and the attitude of brooking no resistance to great plans gave rise in some cases to a disposition which, if not arrogant, was at any rate little disposed to submit to restraint or dictation from any opposing body of opinion, whether from labour unions, or from politicians, or from courts. Least of all, perhaps, was it inclined to seek wisdom from academic opinion or social reformer. The tendency was rather toward fighting out controversies than toward compromise. The contrast between dwellings upon the Lake front and those back of the Yards, or in South Chicago, evidenced the sharp division of wealth from poverty.

What place could the University be expected to fill in such a

turbulent, swift-moving stream? Would the City dominate the University? Would the University in time supply new interests and contribute toward new standards of individual and civic life? Coming closer to my own field, the many threads which had been thus far weaving no definite pattern beyond that of the traditional systems and methods seemed gradually to fit into an order which for me, at least, was a new structure. The making of ideas and the reaction of ideas upon the forming and reforming of moral and civic trends became a focus of attention.

Ethics must begin by understanding our ethical conceptions. It came home to me that these could not be adequately understood by purely intellectual analysis. Justice, I found, meant different things to different persons and different groups. Perhaps similar ambiguities lurked beneath other concepts. I determined to ask whether history would throw any light upon their formation. I was not definitely challenging Lotze's distinction between origin and validity. In fact, I had been taken by it when I had first heard it applied to the field of religion. Rather I was following a line which had always been fascinating to me and which had been strongly reinforced by my studies in anthropology and folkways under Professor William G. Sumner. But as time went on I came incidentally upon difference in ethical premises, in what we like to think of as our common morality, which could apparently be accounted for only by the attitudes of mind begotten by status or occupation. I found myself impelled in the direction of the thesis: (1) Moral ideas are shaped under the influence of economic, social, and religious forces; (2) and ideas in turn do not remain as objects of contemplation or scientific analysis only, but become patterns for action, emerging, it may be, in a Russian revolution.

Opportunities for more specific testing of both phases of the above thesis were not wanting. For example, I found myself Chairman of a committee of the social agencies of the City, which had been appointed to keep track of all legislation, proposed or enacted, that might concern the civic, philanthropic, and protective work of these agencies. We framed a number of bills, some of which passed the legislature and became laws. The subsequent fate of a proposal for providing health insurance by the

State was very instructive. A commission was authorized for the investigation of the proposal, a competent expert was engaged, and an excellent study made, but the report which came from the committee to the legislature bore no relation to the data of the experts' inquiry. The combined opposition of labour unionists, physicians, and those opposed to any new and unusual plan killed the measure. It is not easy to pass a law which is likely to interfere with a vested interest.

My closest contact was made possible through an invitation to act as Chairman of the Board of Arbitration in the Hart Schaffner & Marx clothing industry—a responsibility which later came to cover the clothing industry in Chicago. It was of the essence of this function that the arbitration was a continuous process. The Board was like a court in that it recorded all its decisions and followed precedents if these seemed to be the best ways of meeting changing situations, but differed from a court in having no necessary rules except those jointly agreed upon by the firm and the union. As the Board of Arbitration met, not as is frequently the case in arbitration proceedings, to settle a particular strike, but rather as a permanent body to make a substitution of reason for force and determine such policies as would promote peace and efficiency in the industry, the conditions called for adjustment, not on the basis of compromise, but rather on the basis of finding, so far as is humanly possible, what was the right thing and what would give permanent satisfaction.

I served for two years in this work and found it very difficult, but also very much worth while. For nearly every moral principle which I had been reaching by study of industry from the outside was called upon in the settlement of the questions which were presented to the Board. Fortunately, my predecessor had laid well the foundations for subsequent procedure, but every contest for appeal tested the method which I had been following. I repeatedly found that to know the whole history of the situation put a controversy in a different light. I learned at first hand how certain of our basal conceptions are affected by origins.

The thesis that moral ideas are subtly coloured or infected by particular circumstances is opposed to the doctrine that such

ideas are independent of time and place and human bias; that right is right, and may be discovered and fixed by rational intuition unaided and unaffected by feeling or non-rational factors. In the study of this thesis, I had been particularly struck with the obvious derivation of many moral concepts from class distinctions. "Honour," "nobility," are obviously the qualities required or found in a superior class; "mean" and "villain" are correlates. The military class, the sporting class, the trading class, the working class, each has its term of class approval, and some of these ultimately get recognition as good ethical concepts. But with some of the fundamental ethical concepts, the subtle influence of class is less commonly recognized. Let us examine certain influences that work in fixing the meaning of honesty and justice. These are conceptions which Sidgwick treats as lacking in clearness and certainty, when used by common sense.

One day, as Chairman of the Board of Arbitration in a local industry, I had been listening to a rather severe complaint on the part of the management. The charge was made that in a certain workroom the standard of efficiency was low. The particular part of the manufacturing process which was performed in this room had not been placed upon a piece-work basis, nor yet had it been so thoroughly standardized as to give a fairly accurate measure of the work of each man. It was claimed by the management that some of the workers took advantage of the situation and shirked or slacked. "We pay a fair wage; these men do not give a fair day's work in return; they are not honest." Whereupon one of the workers' representatives, not so much in reply to the charge as in genuine uncertainty, exclaimed half under his breath, "What is 'honest'?" I thus had forcibly presented the doubt of the worker as to the standard employed. For when one considers the process of gradual speeding up which has been the accompaniment of constantly improved machinery and constant division of labour, one is forced to recall that the wage cost per hour of product has greatly diminished, while the wage, although increasing, has often increased far less than the total gain from improved processes would seem to warrant. How can we determine what would be the honest share of labour in the increased efficiency

of the machine process? Should all the profit go to the manufacturer, or should a part go to the workman? And if the latter, then how much will be an honest share? Can we say that the bargaining of the market will yield a standard of division which can claim moral sanction, or are we forced to say that if the standard is set purely by the market, then the amount of labour given in return should be set likewise by a purely market pace? In other words, honesty under such circumstances is no longer an unambiguously moral conception.

A slightly different aspect of the ambiguity in the conception of honesty is presented by the so-called double-standard of business and industry. The workman in industry is expected to perform some service and to receive a wage which represents as nearly as can be determined a fair payment therefor. But in many business transactions the only limit of profit is what you can get. The successful business man is he who can reap the largest profit with the least expenditure of effort. It is, of course, not unknown to the worker that profit is justified on the basis of risk which is a feature of speculation. Nevertheless the obstinate fact remains that in many specific cases huge profits are the result of accident, or of sudden demands for real estate, or to general business trends, and do not imply any useful service on the part of the man who profits. The less expenditure in time and effort which he makes the greater the praise for his shrewdness and business capacity. Certainly it is somewhat awkward to have these two standards side by side, especially since it has been customary to shift a considerable part of risk to the shoulders of employees by reducing the force when times are slack.

Conceptions of justice afford a peculiarly complex example of the mingling of rational and non-rational factors. Justice, together with its allied conceptions of what is fair, or equitable, or reasonable, may plausibly claim to be a conception reached by rational analysis. It seems to disclaim any sociological, or economic, or political warping. The appeal of the Hebrew prophet to do justly, no less than the philosophic conception of the Roman Jurisconsult, to live honourably, to injure none, and to give every man his own, or the principles of natural law laid down by Blackstone, may

plausibly claim to be a fixed standard. From the prophetic revival in ancient Egypt unto the present day the scales have been the symbol of justice, and the cry of the "eloquent peasant": "Can the scales weigh falsely?" seems to deserve but one answer. Nevertheless to one who traces the history of the concept in law and morals two strands are evident: on the one hand justice seeks equality through its principle of equality before the law; on the other it is tender to vested interests or existing status; on the one hand it magnifies permanence and fixity; on the other it leans toward giving some place for change; on the one hand it is the ideal of reason; on the other it is the decree of authority. And according as this authority takes the form of precedent or that of the will of the sovereign or of the people, we have the basis for the divided attitude of our poets and the divided conceptions of justice which prevail among our different social classes. Or if we take the mode of defining justice which conceives it as securing and protecting rights, we have still more apparent the influence of class and status. To the property-owning class, rights of property seem fundamental to the established order and good of society. On the other hand, the alleged right of a workman to his job seems a fantastic and fully unjustifiable claim. And a second article in the creed of Union labour, "Thou shalt not take a fellow-workman's job," is likewise incomprehensible to an employer, for whom labour is a commodity to be bought and sold in the open market as is any other unit necessary for production. The thinking of the workman naturally starts from what seems to him the most fundamental of all rights—namely, the right to live. How can one live unless he can get a living? And how can he get a living except as he has a job? And to the man who knows but one craft, what job can he claim if not the one which he has learned and practised?

To the employer, on the other hand, especially if he has built up a business largely through his own organizing ability, the workman has no claims beyond the close of the day or week or month for which he is hired. There may be a place for kindness to the workman who is ill, but there is no requirement of justice.

A head-on collision between conceptions of justice is presented

by recent controversy between mine-owners and miners. In the Hitchman cases the mine-owner required the applicant for a job to sign a contract by which he agrees not to join any labour union while working for the company. On the basis of prohibiting interference with these contracts, the Miners' Union is enjoined by the court from inducing or persuading any of the contracting miners to join the union.

Here, then, is a conflict of fundamental rights which to each party respectively appear absolute. The workman regards the contracts, the signing of which is a necessary condition of getting a job, as depriving him of his natural rights to combine with others in order to improve his conditions. If he is deprived of all help from association, what is left to him? The fact that he has signed a contract does not, in his view, alter the main fact, viz. that he has signed away his one phase of freedom which was most important to him. On the other hand, the mine-owner conceives the business as his business and his property. In his view the union is an outside organization which is interfering with the conduct of his business. He does not ask anyone to work for him. He accepts men who apply. He requires a contract which prevents them from joining a union, but he places no coercion upon any man to compel him to sign this contract. The right of property and the right to combine are here in flat contradiction. Which set of rights is favoured by courts will evidently depend upon which, in the opinion of the court, are most important to preserve.

In other words, justice is in certain hard cases dependent upon the standard set by the court.

The theory is, of course, that the courts decide cases according to law and not according to bias. No doubt this is true in many types of cases, but in the cases which involve fundamental conceptions, where it is often the decision of the court that will make the law and not *vice versa*, we see the complex influences at work.

The conclusive evidence that the judges are expected to make the law in a given direction is seen in the weight attached in a presidential campaign to the appointing power of the President. When a strong argument for the election of a given candidate for the presidency is found in the probability that he will appoint

safe or radical members of the court, no further evidence is needed that the Supreme Court is expected to follow the elections.

The logic which underlies such facts as we have quoted is highly instructive for the procedure in pronouncing judgments in new situations. On the one hand, we attack a situation, bringing to bear previous judgments, which have been more or less consolidated into a rule. But the new situation presents stubborn facts which are not easily brought under the rule. To abide by the rule as a definite standard satisfies one demand; it yields the formula for equality of treatment which is certainly one of the factors in justice. But as Professor Pound has so clearly shown, the opposing demand is equally strong, viz. that we should not be influenced by abstract reasoning in such fashion as to lead us to ignore the actual circumstances of the specific case. "General propositions," says Mr. Justice Holmes, in his famous dissenting opinion in the case of Lochner *v.* New York, "do not determine concrete cases." The logic of the whole process of idea formation and reconstruction could scarcely be better suggested than by the above statement and its implication.

The uncertainty which Sidgwick found in the concept of justice as it functions in the morality of common sense is not surprising when we consider the origins and developments of court rulings. The standard will swing this way or that according as influences of class, or profession, or individual temperament come in to decide which rights ought to prevail.

If, now, it be asked what effect this habitual mode of seeing problems in their concrete and institutional settings has had upon my attitude toward the great historical problems of philosophy, I think I should answer somewhat as follows: I had been easily persuaded by the many arguments by which Plato endeavoured to prove that pleasure could not be considered as the only good. A health of the soul, a life guided by reason, and fulfilling a function in society, a balanced or measured life in which thought and feeling, intelligence and pure pleasures, should all have a place—this seemed and still seems a fair picture. It appeals to the young, it has a permanent message for each new generation.

Nevertheless the picture does not include the greater issues of our day. To interpret these Kant had projected his concepts of duty, universal law, worth of personality, freedom through autonomy. It was an interpretation which sought to include the sacredness of the Hebrew-Christian divine law to which had been added the rational basis of the Stoic-Roman conception of law of nature. When the authority of this universal law was transferred from external power to the legislative self, and when such a self was declared to have ultimate worth, it might appear that Kant summed up the twofold outcome of the process which culminated in the American and French Revolutions. At least, it presented an approach to a moral problem which had a fair claim to be set beside the Greek picture.

As I sought to adjust these two rival systems, centering respectively in the concepts of the good and of right and duty, I thought I found in my genetic studies a more valuable clue to the problem as to which concept should be taken as primary and which made subordinate, than an attempt to solve the problem by analysis. For if we look at the origins of these ideas we find they are distinct. The idea of good is the correlate of desire. It finds its birth in a civilization in which values of various kinds—economic, political, religious, æsthetic—are present; in which wealth, power, delight of sense, or imagination, at once stimulate and satisfy. Wherever, through competition and comparison, the various impulses and suggested objects of desire, which give promise of satisfying some urge or interest, come into a field of intelligent choice, choice that involves in the last analysis the determination of a new self at the same time with the preference of the object, we have the category of the good emerging.

The categories of right and duty belong rather to a world of personal relations. Both right and duty speak the language of a principle emerging with the dawning consciousness of personalities in relationship to one another, of a social order which speaks of both permanence and change. It is not strange that a culture, such as that of Greece, made the conception of good central. It was not strange that the interpreter of religion, law, and freedom, should make the conceptions of right and duty fundamental.

But the great ethical question of to-day is not precisely that of Plato, nor that of Kant. It is the question of the ethical principles which are now on trial in our social-economic-political system. It is not a question of imagining a perfect state laid up in heaven, but rather of watching the forces and ideas at work in the societies of America, of Europe, and in the not distant future of Asia. If anything was needed to sharpen our interest, Russia has supplied the lack. Capitalism and communism stand over against each other, while Facism holds itself proudly above both.

Capitalism, as interpreted by Adam Smith, combines three ethical principles. It was based on freedom—freedom to do what one likes; freedom to control one's own property; freedom to buy and sell and exchange as one pleases; freedom to adjust prices by bargaining rather than have them adjusted by guild or government. It was opposed to the medieval doctrine of status. Such a doctrine was welcomed in Europe, but it seemed even more at home in America, for it had no vested rights to fetter it.

In the second place, capitalism made strong appeal to self-interest. The natural right of property, or of the pursuit of happiness, seemed already to put the individual into the centre of his world of affairs. Adam Smith held that a man could look after his own affairs better than another. If each man could look forward to profit from his activity he would have the strongest motive to production. The whole motivation of capitalism has its focus in self-interest. In other words, capitalism rests for its second support upon egoism.

In the third place, however, the egoism of capitalism is harmonized with the universal and democratic principle of utilitarianism. If everyone sought his own good, he would contribute in the most effective way toward the happiness of all. Certainly a system which could combine egoism with general welfare, freedom with equality, might claim to be the work of divine wisdom and divine benevolence as Smith declared. But as the system developed in full force, as it employed not merely the new forces of steam and machines, but the co-operation of great numbers of men, the accumulation of credit, the control over transportation, the fixing of prices, it created huge organizations of capital

and threatened complete control over the laws of debt and credit, of supply and demand, of price and valuation. On the one hand, the power of wealth with its extraordinary inequality of distribution, on the other, the power of the people expressed through legislation. On the one hand, the masters of our economic life, selected by the competition of the market; on the other hand, the masters of our political life, selected by votes. It is a conflict upon a grand scale. On the one hand, capitalism is immensely profitable; it makes possible a general level of comfort such as had not been known before. On the other hand, is it not probable that to rely upon egoism as the great motive for the world's work is to foster a certain hardness of temper on the part of masters of industry, and to make material wealth the highest value in the scheme of life? I fear that it is. I believe that we have, on the whole, reason to be content with our culture and civilization in proportion as we have found a balance for the naked principle of capitalism. This balance is found, not so much in the attempted legislative control of trusts and monopolies, of huge fortunes, of railroads and banks, as in the policy of public education for all children and young people, which has become increasingly the pride and the serious enterprise of American life. The equality of opportunity, which is afforded in education, stands over against the inequality of property and income, and is in the long run likely to be at least equally significant for liberty of soul.

Capitalism is on trial as to its ability to secure decent living conditions for all members of society. It is worth while to have an experiment which seeks to make sure of a minimum of necessities for all its citizens. Brutal as the rule of the Bolshevik has been in its methods of control, it has one principle which it may be well for the world to see tried under fair terms. The principle that all should share in at least the necessities is worth trying. At any rate, it is likely to have a considerable trial. The philosopher may be permitted to watch it, although he may expect in some quarters condemnation for his temerity. When the great world conducts a gigantic experiment, the philosopher may at least watch and learn.

My experience in college teaching, which will complete its

fortieth year this coming spring, has been highly fortunate in the contacts which I have made with young men and young women. Very few of them, so far as I have been able to follow their careers, have failed to be useful men and women, and many of them have become distinguished in the world of scholarship and the world of affairs. I differ strongly from the opinion of many writers upon educational subjects who condemn our American system of college education and would confine the work of universities to graduate and professional schools, and who regret the increased tendency on the part of young people to seek a college education.

With the highest respect for men in the professions, they are not, on the whole, the most influential members of the commonwealth. If the college and the university fail to give education to the men of affairs who are the strongest power in American life, they are missing a great opportunity and forsaking a trust. With all due respect to the importance of devoting time and funds to research, through which the causes of natural and social processes can be brought to light, it may be questioned whether any process is more important than the process of education, and whether college and university can afford to omit from their programme the education of those who are probably for some generations still to come likely to be the leaders in the commonwealth. It may well be that a different college system may give better results than the apparently wasteful methods now in vogue. It seems that our colleges, like our cities, have outgrown the village form of organization and government which gives rise to grossly defective administration. Yet it ought to be possible to maintain for college students the ideals of scholarship and the union of freedom with responsibility which have marked our best institutions. Having taught in an endowed small college for men, in a co-educational state university, and finally for most of my life in an endowed university in which research has been a prominent feature, I believe that the small college will continue to have a place in education; that the State universities in the greater states will probably be forced to divide their numbers in some fashion, especially their undergraduates, or else find in the organization of junior colleges a measure of relief; and that endowed universities may wisely

experiment along a variety of types of organization, but will, in my judgment, make a mistake if they disclaim all interest in the education of men of affairs. At present, one of the most serious questions is the somewhat mediocre type of student who presents himself for graduate work. It is a common complaint that numbers of candidates for the master's degree are increasing in quantity without any corresponding improvement in quality, and that even a considerable proportion of those who receive the doctor's degree prove unable or disinclined to carry on scholarly production after their doctor's thesis. In other words, the calibre of those who are candidates for positions as college and university teachers is by no means what is to be desired, if American scholarship is to occupy an appropriate place in the field of world scholarship.

So much concerning the general problem of education I have ventured to put forth as an article of faith to which I have come to subscribe during my administrative experience as Dean and Vice-President.

Thus far my more reasoned beliefs. I add certain reflections—perhaps they do not merit the term beliefs—which have a place in my total attitude. These concern art and religion.

My early life was not particularly adapted to cultivate a taste for art. A country village provided no art except music, and Amherst in the 'eighties, although one of the world's choice places for its natural beauty, offered likewise meagre opportunities in the Fine Arts other than literature. Yet in this college period two windows were opened which have never ceased to afford calm and refreshment—namely, Greek tragedy and modern literature, especially English and German. Travel has enabled me to enter into the ideals and constructions of Western Europe, and I have found much material for instruction and appreciation in the cultures and products of our American Indians. I have found in the teaching of æsthetics to successive classes of young people an opportunity to afford some aid in appreciating both natural beauty and the forms through which the human spirit has found expression. I believe strongly that our young people need in their lives at just the college age the control and poise and sublimation which

are found in the best types of art and literature. I have found interest and satisfaction in aiding them to see nature and art and to listen to music with more intelligent appreciation, and to recognize that the values of life are not exhausted by knowing and doing. I look at the decorations, patterned from the lotus flower, which beautify many of our buildings, and wonder whether anything which we are now thinking or doing or creating will last five thousand years and find itself as perennially a source of joy. I believe that it helps to give students a juster view of the worth of different cultures and the capacities of other peoples, to become familiar with the patterns which these folk of past ages and wide areas of earth have devised. To follow sympathetically the expressions of beauty, to be lifted by the sublime, to confront calamity and catastrophe with tragic depth of comprehension, and to look upon all human efforts and good or ill fortune with the sympathy and detachment of friendly good humour—all this belongs to the philosophy of life.

I began this sketch with a reference to the changes in religious doctrines which I have seen and in a sense felt to be vital. The religious community of to-day is beginning to be aware of the gap between the facts which early religion sought to interpret and the symbolism which was used in this effort at interpretation. But no new symbolism has yet proved adequate to embody the profounder experiences which religion has included. Liberally minded members of the great community are seeking new imagery, but to find an imagery for spiritual needs and values, comparable in power and tenderness with the symbolism of the ages, is not easy. Meanwhile, those for whom religion is a spirit rather than a doctrine may at least find themselves united in the desire to bring about a better order in human society, and as such may feel, if they cannot know, a unity with whatever makes for good.

More than most, perhaps, who have aimed to think through these problems honestly, I have continued a relationship with the Church, for I have considered the common purpose and the common feeling more important than the credo. The Church has, on the whole, and in spite of its failures, borne witness to the existence of other than material aims. How the future will meet the change in symbolism and preserve the spirit which has declared the abiding values to be faith, hope, and love, I am content to leave for coming generations to disclose.

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METAPHYSICS AND VALUE

By WILBUR M. URBAN

Born 1873; Stone Professor of Philosophy in Dartmouth College, Hanover, New Hampshire.

BIOGRAPHICAL

I WAS born in 1873, the son of Rev. A. L. Urban, a clergyman of the Protestant Episcopal Church, from whose essentially philosophical and mystical mind I received most of my philosophical interests and impulses. I was educated at the William Penn Charter School, Philadelphia, and at Princeton University, receiving from the latter the A.B. degree in 1895. In the same year I was appointed Chancellor Green Fellow in Mental Science at Princeton. I studied at different times in the Universities of Jena, Leipzig, Munich, and Graz, passing the examinations for the doctorate at Leipzig in 1897.

METAPHYSICS AND VALUE

I

ANY man's *apologia pro sua vita* has its own interest—often as we have come to feel in this age of human documents, the more insignificant the life, the more significant the apology. This is perhaps all the more true in the life of thought. All serious thought, however inept and however limited, has not only its own little dignity, but also, perhaps, its own claim, however slight, to the interest of one's fellow-thinkers. It is only on some such assumption as this that I have dared to accept the invitation of the Committee to write "an intellectual autobiography, in which the psychological causes as well as the logical reasons" for my "philosophical creed" are set forth. It is only because I believe that the way my own thought has gone in the last quarter-century may throw some light on the problems of this interesting epoch that I feel at all justified in displaying it.[1]

I cannot but envy those who are studying philosophy for the first time at the present moment. It was my own evil fortune to begin that fascinating study in what was in some respects the most unphilosophical atmosphere the world has ever seen—that period of scientific positivism that began about 1850 and lasted on into the twentieth century. It was necessary historically that the offence should come, but it was rather unfortunate for those of us who had to suffer the offence. I do not mean, of course, that there were not strong influences working in the opposite direction. In my own case, for instance, under the teaching of such men as A. T. Ormond at Princeton and later Rudolf Eucken at Jena, I learned the significance of the great speculative systems. In my heart I knew that they were right, but the form of presentation was somehow not such as appealed to

[1] The request for a statement of my philosophical creed at this time is in my case singularly inopportune, for the reason that much that I should like to presuppose in this statement has only recently appeared in a book that represents the thought of a decade or more. This book, entitled *The Intelligible World: Metaphysics and Value*, is from the press of George Allen & Unwin, Ltd., London.

me at that time. The chief sources of my inspiration came rather from J. M. Baldwin at Princeton, with his genetic psychology and evolutionary naturalism; from Otto Liebmann at Jena, with his cry "back to Kant"; and later from Wundt (in whose laboratory I worked in Leipzig), with his ideal of scientific method in philosophy. In the anti-metaphysical atmosphere which then prevailed it was only natural that we felt it to be almost a sacred duty to suppress all the spiritual initiatives, all the natural metaphysics of the human soul, and the intellectual and moral scars left by these inhibitions will probably never be completely removed.

This was all the more unfortunate for me in that, although I did not know it fully then, I am one of those whom *Metaphysik allein macht selig*. As a youth I could apparently have devoted myself with equal pleasure to literature, religion, or philosophy. As I look back now, I can see what it was that drove me on to philosophy—that metaphysical instinct which, in one aspect at least, is only the highest sublimation of the will to live. Philosophy, metaphysic—what you will—is for me life itself, or at least the interpretation of the meaning of life. How bring the light of thought to play upon this meaning without, so to speak, drying it up, without turning it into the desiccated preparations of theory? How understand the meaning of life without turning it into that which it is not? How shall philosophy remain knowledge without being subject to all the prejudices and limitations of the theoretical point of view? In these few sentences is expressed, I think, all that needs to be stated specifically about the psychological motives, as well as the philosophical ideals, that have determined all my thinking.

II

For convenience, I shall date my self-conscious purposive thinking from the summer of 1897. It happened at that time—in the second year of my graduate study in Germany—that I came upon, almost simultaneously, two books, the ideas of which were, by a kind of chemical combination, to start all that was

individual in my thinking. The first of these was Nietzsche's *Genealogy of Morals*, the second Meinong's *Psychologische-ethische Untersuchungen zur Werttheorie* (1894), both of which I picked up almost by accident in the bookshops of Jena and Eisenach.

I shall never forget the long night in which I read through the *Genealogy of Morals*. It was, I believe, the greatest single spiritual adventure of my life. In the grey light of the morning I found myself surveying the wreckage of my beliefs in a curious mood—one in which a profound sense of loss was not unmixed with that unholy *Schaden-freude* in which the naturally destructive instincts of youth so often find satisfaction. Enough that I knew from that moment that, not only was the problem of values my problem, but also that it was destined to be the key problem of the epoch in which I was to live. So far as the immediate problem—of the proposed transvaluation of our *moral* values—is concerned, my personal solution is here of no interest. The important point is that the problem widened out for me, as it did for Nietzsche himself—and for many others—into the problem of values at large, including the values of knowledge and logic. In all these matters Nietzsche has always been for me a sort of *advocatus diaboli*, as it were. In this *enfant terrible* of modernism I have found, not only the most incisive intellect of our time, but the epitome of all that I have come to recognize as the spirit of modernism. But of this more later. The immediate effect of the *Genealogy* was to create in me the desire to investigate the whole field of human values.

At this time my entire thinking was determined by what is called the "scientific point of view." Not only had I adopted the "protective colouring" of scientific method, but like many at that stage of development I really knew no categories except the existential and the causal. Between explaining a thing and understanding it I saw no difference, and a genetic account of the origin of a thing was the same thing as its interpretation. It was natural, therefore, that Meinong's little book should have much to say to me. "The value problem before the forum of psychology," as he described it, was precisely what I wanted at that time.

I saw in Meinong's little book many things. First of all, of course, an unusually keen application of scientific method to the problems that fascinated me. But as I look back, I now see that there were certain germinal ideas which, although I did not fully appreciate their implications then, were to be progressively more and more influential. For one thing, I saw that, even before the forum of psychology, value must be clearly distinguished from "pleasure-causation"; that value, while feeling, is the content of feeling only when it is mediated by judgments and assumptions. This was my first inkling of the possible limitations of a causal, genetic point of view, and a fuller realization of the implications of this thesis led me into the entire problem of the relation of knowing and valuing, and ultimately to the question of the relation of value to reality. In the meantime, however, the studies of Ehrenfels served rather to confirm me in the psycho-biological point of view. Value appeared as "a biological phenomenon appearing in a psychological form," and this conception started me on an analysis and interpretation that was essentially genetic and evolutionary in character, and which served to raise the question of the relation of genesis to value and validity in an acute form.

The thought of this period naturally found expression in many papers, largely psychological in character, and in a book, *Valuation: Its Nature and Laws*. What I had in mind in the latter was, of course, a kind of phenomenology of valuing. My object was to explore all the different fields of value, to connect fields hitherto unrelated, to discover, if possible, any laws or principles that might be found to be common to these different fields, and to explain or interpret, if possible, the levels of value and preferences between these levels. How successful I was in accomplishing this object is here wholly beside the mark. The only thing of interest here is the place of this work as a stage in the forming of my own philosophical creed. From this point of view the book has always been a source of real embarrassment to me. For it turned out, as is often the case, that its completion marked the passing beyond the stage which the book itself represented.

As to what happened to me in the course of the writing of this book, I can merely suggest it in the barest outline. What I wanted was really to *understand* human values. To this end I had developed what I called the *Presuppositional Method* which, as I defined it, should stand midway between the method of interpretation of the normative sciences and the causal method of explanation which abstracts from all meaning and its interpretation. I can only say that when I came to the fundamental problems of the last chapters I found the method breaking apart in my hands. I now realize that what I was feeling after was such a phenomenology as was much later developed by Spranger and Jasper, but which was possible only after value theory had developed far beyond the point which it had reached at that time. The immediate result for me was the practical abandonment of the psycho-biological approach to value, and the development of the *axiological* standpoint and method.[1] It led ultimately, of course, to a denial of the prevenience of scientific method and to a recasting of my entire conception and ideal of philosophy.

The attainment of this standpoint—which I have called the "axiological point of view"—had important consequences for my general philosophical position, of which I shall speak presently. It will be enough to mention here three important positions to which the working out of this standpoint led me. I came to see, for one thing, that value is ultimately indefinable in the sense that it cannot be understood through other things; it is rather an ultimate category through which other things (including

[1] The term "axiological" was coined by me wholly independently, and, so far as I know, it occurs in no earlier literature on Value. I mention this fact, not because of any special pride in the invention itself, but rather because I wish to show by mention of the fact that the same necessities of thought that led to its creation elsewhere were equally present in my own thinking. It is, however, something of a pleasure to remember the fun that some of the reviewers of *Valuation* had over the coining of this new term. As to the neo-Kantian literature on Value, especially the writings of Windelband and Rickert, my indebtedness to them is, of course, immeasurable, but rather in the way of helping me to find expression for my standpoint than in determining that standpoint itself. My own position was determined rather by reaction against the pragmatic and neo-realistic theories of value.

truth and existence themselves) are to be understood. The conception of value as a quality which underlay most of the current theories of value I found to be, not only the result of a faulty analysis of the "value judgment," but the source of most of the perplexities and artificialities of these theories. I came to see that knowing and valuing—fact and value—are inseparable. Reality, as we live it and know it, is our reality only as the stuff of experience is formed by the categories of value. We orient ourselves in the world by the relations of over and under, right and left, more and less, but not less necessarily by the relations of higher and lower, better and worse. It was one of Kant's peculiar limitations that while he recognized that the knowledge of nature is determined by certain forms immanent in mind, to the equally necessary forms of interpretation of life and the world he allowed merely the character of practical postulates. Though a necessary stage in the restoration of the objectivity of value, this was only a temporary position. I sought, therefore, to work out the *a priori* elements in value and valuation. Finally, I came to see that the fundamental problem of all philosophy is the relation of value and existence in a total "world-view." This involves the question of the ontological *status* of value. I had to admit that when one asks *what* and *where* value *is*, one is led into what are apparently almost insoluble problems. On one point alone was I quite clear at this stage—namely, that value is not an "existent" nor "subsistent" in any intelligible meaning of those terms—that its being is its validity. In a very significant sense "value is above all ontology," and the full realization of the implications of this fact was bound, I felt, to lead to a reformulation of the entire philosophical problem.

It is not necessary here to recount either the stages by which this general standpoint was reached or the arguments for the specific positions which it includes. They constitute a well-trodden path over which many have gone, and constitute part of the history of thought of the last decades. It is worth while, however, to single out one aspect of my thought for special comment. It concerns the gradual development in my thinking of what I later came to call the principle of *philosophical intelligibility*.

In the working out of my position I had come to see the insufficiency of what I have called the psycho-biological foundation of values. But I had also come to see in it a way of thinking that involves a circle so vicious as to constitute a veritable scandal in philosophic thought. We wish to *understand* values (and understanding involves validation) by carrying them back to life. But in this it is already assumed that life and its continuance have value. We have already acknowledged value as something known. The recognition that value is a logically primitive concept that can be neither defined nor validated in terms of anything else, came to me to be the first condition of any intelligible discourse about values at all. But this circle, apparent in connection with the alogical values, is *a fortiori* present when we consider the values of knowledge and truth. For if knowledge and the logical values, upon the acknowledgment of which knowledge rests, get their significance solely from their teleological relation to life, surely life must get its significance from absolute values which it embodies, or knowledge itself loses all genuine significance. I should put it this way. *Mere* intelligibility—at least *philosophical* intelligibility—necessitates a doctrine of absolute values. In all meaningful discourse about values acknowledgment of absolute values is already presupposed.

The philosophy of absolute values thus became, so to speak, my philosophical creed. And it is in a very real sense a *credo*. Not without a logic of its own, which to its holder seems not only a very cogent but an inescapable logic, it may seem to those who do not hold it one of those cases of giving bad reasons for things we hold on instinct.

In a sense there is something instinctive in it—the fundamental metaphysical instinct itself. The doctrine of absolute values is, in fact, the revenge which the suppressed and violated metaphysical instinct took upon the positivism of the nineteenth century. As such, there is a certain fanaticism in it—if you will. The affirmation of absolute values which do not exist in any intelligible sense of that word, but whose objectivity is precisely their validity—absolute values that can but be acknowledged,

but whose acknowledgment is the condition of any meaningful existential or truth judgment—has, indeed, something in it both of the sophistication and the wilfulness inseparable from our epoch. I had a feeling from the first that this creed, while a necessary stage in thought, could not be final. The self that holds these absolute values, that acknowledges their validity, must also, so to speak, push out into life and reality. The desert of *mere* validity is unbearable. About this very notion of validity I realized certain difficulties. I came to see that while we must learn to breathe this somewhat rarefied air, we could not remain very long in it. Or, to change the figure, while we must learn to talk the language of validity, plain man and philosopher alike must in the end speak an ontological language. By this I mean that while the philosophy of absolute values must be a necessary stage in any intelligible philosophy, it cannot be final; it must ultimately pass into a metaphysic. But of this more later.

III

It is now time to say something of the wider ramifications of my thought—to which, as I have suggested, the theory of value could in a sense be only a prelude. And first of all I find it necessary to speak of the way in which this particular approach to philosophy caused me to envisage the knowledge problem, that problem which, whether we like it or not, we have been forced to make central in our thinking. I can do this best, perhaps, by indicating my reactions to certain major movements in philosophy in the last quarter-century.

It is easy to see that on a mind thus oriented from the beginning, and fertilized in the way described, the pragmatic movement could not fail to have a real influence. I was never for one moment really a pragmatist, but there were long periods when I thought that perhaps I ought to be one, just as there have been long periods when I thought I ought to be a "realist." Some kindly instinct prevented me from committing myself to either position, and I am now able to see why I was preserved. So far as Pragmatism was concerned, the persuasiveness of

William James was almost irresistible. That which appealed to me primarily, of course, was his clear recognition that the problem of knowledge is part of the problem of values at large. The phase of this general position which had most influence on my thought was, however, his very brilliant and original chapter on "Metaphysical Problems Pragmatically Considered."

Under this heading he takes up successively the alternatives, materialism and spiritualism, mechanism and teleology, determinism and free will. On his pragmatic principles, it will be remembered, he argues that these alternatives are irrelevant from the retrospective, scientific point of view. Any decision or preference, for spirit, free will, purpose, monism, have as their *sole* meaning a better promise for the world's outcome, "be they false or be they true, the meaning of them is their meliorism." Of course this original and fascinating reinterpretation of traditional metaphysical problems soon disclosed itself to me as the rather violent *tour de force* it really is. But I also felt that the realization of this fact should not obscure the important half-truth in the conception. The complete truth of these metaphysical conceptions does not, it is true, lie in their meliorism, their practical value, but an important part does. A still more important part of their meaning lies in their value, if value be understood as I had come to understand it. In a world in which certain values were not already acknowledged, it would be immaterial whether the world had its origin in matter or spirit, whether there were freedom or determinism. In a word, these conceptions are really significant only for interpretation, and interpretation presupposes communication with its acknowledgment of values.

For this partial recognition on the part of James of the real nature and meaning of metaphysical problems, I owe him much. If in the enthusiasm of his genial insight he was led to extravagances of thought we now realize, we may perhaps think of them as necessary incidents of a new way of thinking. But the *tour de force* was patent to me. In attempting to separate questions of value from questions of ultimate being—more particularly to separate questions of destiny from questions of origin—he was simply attempting one of those impossible things so beloved of

the modern mind—that combination of incompatibles which, as Ferrero has well said, is one of its chief characteristics.

In indicating one of the important contributions of Pragmatism to the development of my philosophical creed, I have also indicated what prevented me from ever becoming a pragmatist. What was it that held me back? Many things, of course. What I have elsewhere called the essential incoherence of the pragmatic theory of value, which is, of course, but a form of that vicious circle that I have already indicated. Then there is its instability as a theory of knowledge, its vacillation between a naturalistic realism and a subjective idealism. But what chiefly held me back was the inescapable feeling that there was a curious process of *denaturing* going on. Everything it touched with its "pragmatic value," whether knowledge, truth, freedom, God—what not, by a curious fatality seemed to have all its meaning taken out of it. It was something like Midas's golden touch. I seemed to sense from the beginning its predestined end—the pan-fictionism of Vaihinger and the pan-illusionism of Gaultier. An article entitled "The Will to Make Believe," which I intended to be an ironical comment on *The Will to Believe*, signalized at once my experiences with Pragmatism and my deliverance from it.

As I have never been a pragmatist, so I have never really been a realist, although here also there have been times when I felt that I ought to be one. But here I am afraid I shall have difficulty in making myself clear, for the very simple, but what will seem to many curious, reason that I am not an idealist either, in the sense in which the term is often used in current epistemological controversy. My position is "beyond realism and idealism."

With the various "new" realisms I have never been able to come to an understanding at all. For one thing, their "refutations of idealism" seem to me to be based either on an impossible attempt to reduce historic idealism to the Berkeleyan formula, or else on an unintelligent application of a theory of relations, developed in modern mathematical logic, to the knowledge relation where it does not apply. The attempt on the part of New Realism proper to restore a naïve realism by a paradoxical theory

of illusions seems to me to be a violent *tour de force* possible only to a philosophy at its wits' end. With what is called Critical Realism I find myself little better able to come to an understanding. Are universals to be given a purely psychological interpretation, or must subsistents be assumed that have a wholly non-psychological status? Such a divergence of opinion seems to me to be not merely one incidental to developing theory, but one which, when consistently thought out, leads to wholly divergent results. But, after all, it is none of these things—important as they may be in a way—that really determines my attitude towards realism in either of its modern forms. It is rather what I consider the fundamental misconception—on the part of both—of the nature of the knowledge problem.

From this point of view, whatever their differences, they represent the same standpoint and the same point of departure. Naturalism is the keynote of both. For both mind is conceived organically in terms of responses of higher nervous centres. Thus the setting of both is psycho-biological, and to my mind this setting is fundamentally false. It is true that even here there are differences between the two types of realism. Neo-realism tends towards an extreme Behaviorism, and is sceptical of any subjective realm, while the "critical realist" accepts such a realm and holds it to be intrinsic to the total "organic response." But from my point of view these are minor differences. Both involve a peculiarly vicious circular movement of thought which, to me at least, means philosophical unintelligibility. First, various natural sciences are taken as premises for the conclusion that the objects or contents of consciousness occur within the organism as part of its response to stimulation by physical objects other than it. Then we are told that these intra-organic contents have a cognitive function. But how invest them with a function which by their very definition and characterization they do not have and are patently incapable of discharging? The fact that so many modern minds do not feel difficulties of this sort is one of the things I have the greatest difficulty in understanding. I can only explain it by surmising that our extreme empiricism has robbed us of a certain sense for logicality, or for

what I should call the finer, inner harmonies of thought—in other words, the sense for philosophical intelligibility.

Nevertheless, as I have said, there have been many times when I have felt that I ought to be a realist. In my perplexity I turned to certain forms of realism which have been developed in Germany. In this connection I may perhaps refer to an experience in the year 1913, part of which I spent with A. Meinong in Graz. Ostensibly there for the study of value problems, I was secretly hoping that I should be converted to realism. Our specific problem was whether values should be considered *Gegenstände* in the sense of some form of subsistence or whether their being is their validity. As we spent many afternoons reading Rickert's *Gegenstand der Erkentniss* and Husserl's *Phenomenologie*, we were led into all the questions of realism and idealism. With the general standpoint of *Gegenstand-theorie* and *Phenomenologie* (for in fundamentals they are the same movement), I found myself in very real sympathy. Here the setting of the epistemological problem is not psycho-biological; the realism of the phenomenological point of view is not tied to naturalism. But it is precisely this study that led me to go the way of Husserl rather than that of Meinong. When Husserl finds that the very condition or presupposition of the phenomenological point of view itself is "a transcendental sociology having reference to a manifest multiplicity of conscious subjects communicating with each other"—a transcendental monadology, as he calls it, I can only agree with him. *This communication is the ultimate fact to which all analysis of knowledge must come.* If this is idealism, as most of his critics say that it is, then I am an idealist. For my own part, I think that it is a position that transcends the opposition of realism and idealism.

I should like to take the present opportunity to develop this position which I describe as "beyond realism and idealism," but space will not permit. I have already published a preliminary sketch of my solution of the problem, and am now developing it in fuller form. I can merely suggest here in the most general way the lines along which my mind is moving.

I have come to believe, with many of both parties to the

dispute, that the opposition is not fundamental, but one that can be transcended. I believe that the developments of modern science have done away with many of the extrinsic motives that have kept alive the opposition; and also that the increasing agreement of realists and idealists as to the over-individual and over-social nature of values is creating a standpoint from which the opposition becomes greatly softened and takes on a new and different meaning. Of determinative importance, however, is my present conception of the nature of the problem itself. I have come to believe that in this dispute we are not concerned with a problem of knowledge in the ordinary empirical sense at all, but with a matter of *dialectic*, wholly within the realm of discourse. Neither idealist nor realist can *prove* his own position, and neither can really *refute* the other, as indeed Fichte long ago saw. The arguments of either position are cogent only for one who has already acknowledged the ideal of "genuine knowledge" or of "*bonâ fide* logic" already postulated. In other words, the epistemological problem is part of the problem of values at large. If, then, we change the form of our question and ask what ideals of knowledge must be postulated, what logical values must be assumed, if genuine knowledge is to be possible, we shall find, I think, that in the end both of the values for which idealists and realists have stood must be acknowledged. Otherwise stated, a problem that has proved wholly insoluble from the existential point of view is fully capable of solution if we take the *axiological* standpoint; the two positions which are in complete opposition from the point of view of the exclusive logics of realism and idealism are entirely compatible from the standpoint of values. For these and other reasons I am coming to believe that a proposal, such as that of Professor Kemp-Smith, "to formulate an idealist theory of knowledge on realist lines," is not paradoxical but fully capable of being carried out.

In any case, my own epistemological creed contains three articles which seem, to me at least, to be essential to any enlightened theory of knowledge. First, the activity of knowing cannot be the object of "science" in any intelligible sense of that word, for science presupposes it. Secondly, all genuine knowledge

presupposes that the object of our knowledge is different from our thinking, but it also presupposes communication from mind to mind, and such communication, to be intelligible, presupposes mutual acknowledgment of values. Thirdly, the standpoint of a theory of knowledge is above the distinction of realism and idealism, for both must presuppose communication and the realm of meanings and values, the acknowledgment of which alone makes communication possible.

IV

I suppose that one of the most trying problems of my entire intellectual life has been to find a name for my philosophical position. For a long time the term neo-Kantian would perhaps have fitted it better than any other. My indurated metaphysical scepticism was gradually yielding, but I was for a long time under the dominance of the notion that ontology or metaphysics is merely a roundabout way of solving the value problem, and that the solution of this problem *is* philosophy. My creed of absolute values, arrived at in the manner described, and my view of the nature of the knowledge problem, had led me to the position that the farthest point to which philosophy can go is the recognition of the ultimate inseparability of fact and value, value and existence, and that any step beyond that point must necessarily involve a trenching on the mythical or the mystical.

My philosophical conversion to metaphysics really came from something deeper than "logic." I did not so much change my beliefs as wake up to find them changed. Perhaps the change may be described in the following way. I found myself almost insensibly doing something I had not done for a long time—namely, re-reading the great philosophers of the past, not as grist for my technical mill, so to speak, but rather, if I am to be frank about it, as a means of edification. What I wanted was *Weltanschauung*, and none of the moderns had anything to offer. The metaphysical instinct in me, that which alone makes blessed, found satisfaction only in these.

This philosophical conversion, it should be said, was part

of a larger movement of my entire spiritual life. I had come to see that I was living in a period in which the break with the past was immensely more far-reaching than I had realized—that the novel developments in philosophy to which I had sought to adjust my thought were but expressions in the form of reflection of those tendencies in art, religion, and science which we have come to call modernistic. I began to seek to understand this, especially as I found myself more and more out of sympathy both with the mood of modernism and with the premises on which that mood seemed to be based. To my surprise I found it tremendously difficult to really understand my time. It is doubtful whether there has ever been a period in which man has understood himself so little, in which man has at the same time been so knowing and so unaware, so burdened with purposes and yet at bottom so purposeless, so disillusioned and yet feeling himself so completely the victim of illusion. This contradiction pervades our entire modern culture, our science and our philosophy, our literature and our art. What is the meaning of this? I asked myself. Well, I came to the conclusion that we are trying to decide whether we are really merely high-grade simians or whether we are sons of God—in more philosophical terms, whether our intelligence, reason, and all that these terms connote, are really merely biological adaptations or have also a transcendental meaning and *status*. This indecision of the modern mind did not at first seem to bother us, but it is now beginning to get under our skins. We are finding it increasingly difficult to talk about such things as "ideals" and "values," yes, even of truth—the very truth of science itself—without sticking our tongues in our cheeks. Such talk somehow sounds ridiculous in the mouth of a high-grade simian.

In all this some may think to catch a note of fanaticism, and yet it seems to me to express the universal and fundamental problem of our epoch, and our indecision regarding it to be the key to all our incoherence and contradictions. The way the problem presented itself to me was, of course, determined by my own special approach to philosophy and by the terms in which I had been working. From the beginning I had felt, not only

that the problem of values was my problem, but that it was the distinctive problem of the epoch to which I belonged. This epoch, I felt, had now come quite universally to this point: the values are there—in some fashion—irrespective of a mechanistic science, of a devastating *psychologism*, or of a merely biological conception of the mind. But it does not do for the *philosopher* merely to assert that they are there; he must face the question of where they are and how they are there. In some obscure, but very real, way their *very being as values* depends upon the answer to this question.

Hitherto these values had been connected with great traditional systems of philosophy and theology. Gone, we are told, gone completely is this metaphysic. The values must now be transferred to the foundations of modern realism and naturalism. But is this possible? Now it was entirely clear to me from my studies of value that this is not possible. The entire attempt of the modern mind to do this seemed to me but one of the many indications of its loss of the sense of essential intelligibility and of that readiness to combine incompatibles which is one of its chief characteristics. Still less possible seemed to me that other *tour de force* of the modern mind, according to which it finds itself able to talk of values as immediately "enjoyed," but in their essence completely divorced from existence. This seemed to me, not only the height of sophistication, but, as James says, "the perfection of rottenness." Enough that searchings of mind and heart such as these led me to review afresh the whole field of traditional philosophy with which the values had been bound up, and to face again the whole way of thinking which had led modernism to turn its back on this *philosophia perennis*. I came to the conclusion that the great tradition is not dead, but that its restatement must constitute the next great step in philosophical development.

In the recasting of my thinking at this point the study of Nietzsche and Bergson was of outstanding importance. In his chapter on "The Prejudices of the Philosophers" I found Nietzsche stating much more clearly than the "technical" philosophers the inmost driving-force of this tradition. He made it clear to me

that there are certain things "common to the metaphysicians of all time." All subscribe to that "mythical philosophy," as the moderns now call it, which connects the values of things in some way with their origin and their end. Bergson also made it clear to me, not only that there is a continuous tradition from Plato and Aristotle to the present time, but that this tradition is really the "natural metaphysic of the human mind." Not only is it the metaphysic to which every mind will come that follows the natural bent of the reason, but it is natural precisely because, as he points out, it is oriented towards value. He sees also that it refuses to separate the meaning and value of things from their origin and their end.

Now it is on this tradition that both Nietzsche and Bergson turn their backs. And why do they thus turn their backs upon it? For the same reason that actuates all the other typical modernist philosophies—for the reason, namely, that the intellect or reason of man, for which this metaphysic is the natural expression, is conceived as a merely biological product, developed on the service of the biological life. All the categories—the logic and the language—in which this natural metaphysics expresses itself, are infected with error and relativity at their very source, and constitute a mythology, amiable or otherwise, according to our mood or standpoint.

Here, then, was finally a clean-cut issue to which my mind was gradually being forced. Between the premises of this tradition and the premises of modernism there is no common ground. The whole question resolves itself into one of those fundamental issues which Fichte analysed so knowingly—one in which the matter is in a sense ultimately one of free choice. Faced with such an issue there could be for me only one choice, for while in a sense it was free, in another sense the option was forced. It is quite possible to say that it is a matter of temperament, of psychological rather than logical reasons, and to such an *ad hominem* there is really no wholly satisfactory answer. In any case, the option was forced for me by what I call the demands of philosophical intelligibility.

What I understand by philosophical intelligibility has been

suggested in a general way at a number of points. I find it wholly unintelligible to seek to validate values by carrying them back to life and at the same time to refuse to acknowledge the absolute values that alone give life meaning, and without which it cannot be interpreted. I find it unintelligible—to the point of being suicidal—to ascribe to knowledge a cognitive function and then so to describe knowledge, naturalistically, as to make the events of which it is composed, by their very nature, incapable of discharging that function. But the climax is reached when we assert that the values are there, are valid, and then divorce them from the only metaphysic that makes their validity intelligible.

It was then by ways of thinking such as these that my creed of absolute values became a transition to metaphysics and to the development of a metaphysical creed. I had already learned one important lesson from William James—namely, that questions of origin and destiny are irrelevant and meaningless if abstracted from questions of value. I now came to see, even more clearly, that questions regarding the validity of values are meaningless if values are divorced from questions of origin and destiny. The temporary effort of the modern mind to do this could be understood only as a necessary, though desperate, resort in the face of an overpowering evolutionary naturalism. I now came to see that the *axiological* point of view, the standpoint of absolute values, not only might be, but must be a transition to metaphysics. I found myself coming to agree with Lotze in his memorable statement that "the apodictic character of experience itself can be ascribed only to the good (or value). Everything depends upon the fact that an *ought* is there, that sets the play of thoughts, of ground, cause purpose, in movement." I came to see that the entire body of traditional metaphysic was essentially a value-charged scheme of thought and must be interpreted from this point of view. Precisely because to separate value and reality is unintelligible, such a value charged scheme of thought is the necessary form of an intelligible world.

Here again I can simply state the metaphysical creed to which I have arrived, confident, however, that it is not only that to which one is inevitably driven by conscious lines of argument

such as I have suggested, but that it also represents the deeper convictions to which the less conscious thinking of the period has driven most of those who have approached the philosophical problem in my way.

I hold that there can be no existence without value and no value without existence. Reality is neither mental nor material, but a realm in which thought and thing, fact and value, are inseparable. The acknowledgment of this relation is the condition of philosophical intelligibility. To separate value and reality leads to contradiction and unintelligibility. To this first article I add a second. This inseparability of value and existence means that value cannot be separated from origin and destiny. These are "time-forms" of value, and no interpretation of the temporal is possible without them. Some conception of *intelligible causation* and of *intelligible finality* must enter into any intelligible philosophy. These categories—together with the categories of substance and totality with which they are closely connected—are very flexible. If one form is refuted, they will immediately take another; but no logic, nor conception of logic, whether atomistic or idealistic—has either the power or the right to turn them into appearance, nor to inhibit the fundamental spiritual initiatives out of which they arise. Thirdly, any intelligible philosophy must be a system—and ultimately a system of values. It is all very well for the modernist to say that system in philosophy is a "rationalization," or that logically a completed system is a self-contradictory notion. The fact remains that without system there is no philosophy, and it is our business to form an intelligible concept of system. Such a system must in the last analysis be a system of values and validities, and must be able in some way to embody or interpret the "form of philosophical intelligibility" which belongs to the innate metaphysic of the human mind.

In thus describing my return to the metaphysic that the moderns have called "mythical," I should perhaps add two further comments. I am not, of course, unaware of the element of symbolism in it. Metaphysic is for me, not as Bergson supposes, the science that seeks to dispense with symbols, but rather that

which develops the symbolism inherent in language to its highest pitch, that which seeks language for the expression of the meaning of reality in its totality. It follows, then, that while this metaphysic, with its concepts of ultimate origin and ultimate destiny, will never be refuted, it is very flexible and capable of ever new restatement and reinterpretation. It is the function of value philosophy to understand its symbolic character and to interpret it.

In the second place, the conception here developed determines my conception of religion and of its philosophy. For me the religious problem has always been the fundamental problem of philosophy. I am, I suppose, what would be called religiously minded. For one thing, when I meet a really religious man I am conscious of a type of personality that I immediately understand —one who has a certain grasp of life and reality that irreligious men have not. In the latter I find a certain leanness of soul that is to me frankly repellent. In any case, this will perhaps explain why, for me at least, religion has always been, to use a term applied by Coleridge to poetry, "covert metaphysics," and I am unable to distinguish ultimately between philosophy and religion. Both have as their ultimate problem the relation of value to reality, and any religion divorced from metaphysics is a *contradictio in adjecto*. It will also be understood why for me Theism in some form is the only intelligible philosophy of religion. For the reason that there cannot be any intelligible metaphysics without intelligible causation and intelligible finality, the form of thinking about God is the same as the form of thinking about ultimate reality; the arguments from first cause and teleology are essentially sound. They are simply special applications of the principle that origin and value and value and destiny are inseparable. Finally, it will doubtless be understood when I say that modernism in religion—with its irresistible drift to a merely naturalistic humanism—is for me wholly unintelligible. If one speaks to me of a "god in the making," I simply throw up my hands. It is simply incomprehensible to me how thinkers of this type should take so long to learn their lesson from Nietzsche —that for them God should have long since been dead.

V

The constant use of the terms "philosophical intelligibility" and "intelligible world" in my later thinking and writing indicates both the standpoint from which I am now viewing all philosophical problems and also the end towards which all my philosophical investigations are now directed. I have come to feel that the basal problem of all science and philosophy is the problem of a philosophy of language and symbolism, and I hope ultimately to contribute something toward the solution of that problem.

The way this has come about is something like this. I find myself in a world of thought and expression in which the language used is in many respects very different from that of the past. So great is this "divide" that some of the more enthusiastic moderns inform us that "our mental nature has so changed that we now have entirely new notions of what facts are and of what standards of thought are." This new mentality is so different that we speak a new idiom, and "we could scarcely now hope to make ourselves understood by minds of an older age." As a corollary of this, I am told that the traditional language of philosophy, in which all the philosophers of the past have held high converse, must now be abandoned because it is bound up with a form of logic which the labours of certain modern logicians have rendered obsolete.

All this, of course, throws me into a state of great bewilderment. For one thing, a large part of what the moderns are saying in this new idiom is to me wholly unintelligible. I understand the words, of course, but I do not understand the sense. When they speak of Socrates as a "collection," or tell me that there is no such thing as consciousness in their language, or that it is no longer good form to use the words, substance, cause, purpose, because science does not use them in its language, I am of course puzzled. But I am even more bewildered when I am told that because our natural language is infected with error, the ideal would be a logic that abstained from all use of natural language, and to develop a Volapük in which there would be no subjects and

predicates any more. I am bewildered because I cannot see any outcome to this except a complete paralysis of speech. I don't see how we can go on talking at all unless there are subjects to talk about and predicates to apply to them.

Again, all this naturally leads me to ask the question: how they could possibly "get that way?" I find that it is fairly easy to see how men can say such things if one understands their premises. I find all these moderns, whether they are pragmatists, atomistic logicians, or intuitional mystics, have much the same things to say about language—and for much the same reasons. They all think of thought, and therefore of language, in a purely biological context. Language being "but the cries of the forests, corrupted and complicated by arrogant anthropoid apes," it is unfitted either to grasp or express the true nature of being: it is not "moulded on reality." Whatever may be said of the premises, the consequences are astounding. The modern mind seems to find itself suspended between two contradictory positions, both of which it is trying to accept at the same time. In one mood it is flirting with an extreme Behaviorism which defines science as language well-made, and then views language as a merely biological adaptation to environment—the only result of which is a pan-fictionism that swallows up science itself. At another moment it dreams of an absolute logic which can become so only by a complete divorce from language. In the first case language can say nothing true, in the latter nothing that really interests anybody.

This is what I call neo-nominalism, and is the key to all modernistic tendencies in philosophy. Now I agree that on such premises the language of traditional metaphysics is "either nonsense or a sorry sort of poetry." But I also think, with Chesterton, that such nominalism is the deepest of all heresies. It is, surely, a dreadful thing to be told that there is no Socrates, or that when we use such terms as life, soul, God, personality, beauty, truth, etc., we are using words for which there is no "referent." It is a dreadful thing to be told that all these are "pseudo-simples," and that all the categories of substance, cause, purpose, with which philosophy has operated in the past, must

be eliminated from the polite discourse of the moderns. But that is not the most dreadful thing about this heresy; it is rather the thought that, if I am to be logical in this sophisticated sense, I must turn my back entirely on the natural logic and metaphysics of the great minds of the past, and in the end confine my communication wholly to these moderns.

The outlook is really too dreadful to contemplate! For myself, the whole thing seems to me to be one of the most monstrous thoughts that it has ever entered into the mind of man to conceive. I am sure that there must be something terribly wrong with it, and for my part I am determined to find out what is wrong. In any case, I am convinced that this whole question of language and logic will have to be gone over again—and from the beginning. I think that we shall have to take again as basal certain things that are now everywhere impugned: (1) that communication, and a certain trust in natural language necessary for communication, are presupposed by knowledge and science, and cannot in any intelligible sense be explained by science; (2) that the potentiality of logical form in natural language is the necessary postulate of such communication, and therefore of any intelligible logic; (3) finally, that the natural metaphysics which has developed out of natural language in man's efforts to express the meaning of life, and of the world in which that life is lived, cannot be fundamentally invalidated by any later developments of language and logic created for certain specific purposes.

I cannot, of course, argue in detail for these positions here. I can only say that to work on the opposite assumptions means, if the consequences are carried out consistently, not only that philosophy is ultimately shorn of all the concepts that have hitherto made communication possible, not only that most of the things about which philosophy has hitherto talked must be put in the class of "those things that cannot be expressed," but ultimately that complete paralysis of speech to which I have referred. This seems to me to be a veritable *reductio ad absurdum*, and merely part of the general philosophical unintelligibility of which I have spoken.

VI

At the beginning of this attempt to state my philosophical creed, I referred to it as an *apologia*. For reasons that are now apparent, it is perhaps of necessity more of an apology than many of the other papers in this series. To be a fundamentalist and traditionalist in philosophy requires, to be sure, more justification than any reasons I have been able to bring forward in this context; I shall be content if I have been able to suggest some of the more compelling motives that have actuated my thinking.

There is one point that I feel that I must add in conclusion. A philosophical *creed*, like any other—religious, social, artistic, scientific—involves always in a sense, and to a degree, "believing where we cannot see." There are many things that I cannot see, and in all probability never shall see clearly. I cannot quite see, for instance, just how fact and value, value and existence, are related (there are many perplexities here), although I do see perfectly that to separate them means ultimately unintelligibility. All attempts to state that relation leave something to be desired; I cannot deny an element of mystery here. Again I cannot quite see how the absolute values are to be grasped as a totality. There are many things that argue for their autonomy, and no attempt to organize these values in a system has been satisfactory. But I do see clearly that they do constitute a totality, and that system is the condition of intelligibility. And so it is with all my major beliefs. Thus, for me it is true—both psychologically and philosophically—that "the soul possesses God in so far as it participates in the absolute," but a complete indentification of the religious with the metaphysical notion I have never found possible.

I do not see these things, I say, and yet this is not quite the truth. I see many of these things in certain moments of insight, and these moments are sufficient to bear the weight of a great deal of rationalizing. I must therefore admit a certain element of mysticism into my creed and, like James Ward, acknowledge that the most fundamental things in philosophy cannot be

expressed without "trenching on the mystical." But this does not disturb me, for it is the one thing that above all else proves to me the inseparability of philosophy and life. In any case, I am not a mystic in the sense that my mysticism involves either a negative metaphysic or a negative theology. I find myself akin to those who have found it possible to live with comfort in the great systems in which *philosophia perennis* has continually expressed itself. These systems are in a sense houses (man-made houses, if you will) in which men dwell. Even so I for one am content to dwell in such a house, for I am sure that in some way which I cannot quite express, back of it, or in it, is "a house not made with hands, eternal in the heavens."

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AN UNBORN IDEALISM

By ROBERT MARK WENLEY[1]

[1] Died March 29, 1929.

Born Edinburgh, 1861; Head of the Department of Philosophy and Psychology in the University of Michigan since 1896.

AN UNBORN IDEALISM

THE courteous invitation to appear in this volume asks, among other things, that the article "should embody its author's philosophical creed." Good omen or bad, I am still in search of one! Fortunately the sentence continues, "together with the circumstances in his life history which have influenced him in reaching it." So, my creedlessness may be mitigated somewhat by the fact that the conditions of my nurture and education, far away and long ago, cannot but be in sharp contrast to those of my colleagues. This creates a diversion which seems to compel a fuller account than would be advisable otherwise. It may be apposite to recall that I did not appear upon the American scene till I had turned thirty-five, and to add, that nobody escapes these formative years. What came before 1896 is of paramount importance, so far as I can judge, and I offer no apology for intruding it.

The same interval has sped since F. H. Bradley wrote: "The present generation is learning that to gain education a man must study in more than one school." [1] Well, it goes without saying that America furnished abundant opportunities for a second education, to use Gibbon's phrase. More to the point, probably, when a youngster I was cast unwitting into the vortex of a definite "school" at its liveliest. With praiseworthy intent, my father wished me to complete the Arts course at Glasgow ere adopting the profession he recommended. His selection was the fruit of intimate knowledge of feasible careers, to put it mildly. The vortex whirled me from a secure, not to say profitable, berth with a solid firm of Scots "writers" (*more Americano*, lawyers)—manifest proof of its coercive effect, the counter-attraction considered. As a sequel, I found very much to learn and unlearn in the school of a life, precarious and unremunerative by comparison. Moreover, the influence of a system, despite harsh experience, convicted me, if not of gullibility, then of unwisdom; so my father's circle judged emphatically. Thus, the sympathetic or benevolent optimism of teachers, to whom ties of scholastic respect and personal affection bound me, was shaken by know-

[1] Preface to *Appearance and Reality*, p. xiii (1893).

ledge of evils in their proportion—nay, beyond all proportion, as it seemed to me more than once.

I

Like kindred institutions everywhere, the Scottish Universities, especially the two larger, Glasgow and Edinburgh, have undergone profound changes since my graduation forty-four years ago. So much so, that contemporary teachers and students could scarce reconstruct the situation in my time; Americans would be wholly at sea. The reason is not far to seek. It has been well said that, till the Act of 1889, the Scottish Universities preserved the mediæval tradition more closely than any of their European sisters. When I matriculated, a bare decade had passed since migration to the present spacious buildings (1870) from the cramped seventeenth-century quarters (1640), themselves the third home since the original charter (1451). Our professors, with one exception, having taught in the old place for years, kept touch with an age strange even to my generation.[1] More important, the *Trivium* and *Quadrivium* remained strongly vestigial in the curriculum for the Arts degree. Choice there was none. Two years of Latin, Greek, and Mathematics; one year of Logic, Moral Philosophy, English Literature, and Natural Philosophy (physics) were obligatory upon every candidate for a "Pass"; an admirable discipline, which had everything to do with that typical product of the "old" Scots' training, the polymath. (Perhaps I ought to interject at this point, that I sometimes think of myself as nigh the last of the line!) For "Honours," one had the choice of the "Departments" of Classics, or Mathematics and Natural Philosophy, or Mental Philosophy (including English Literature). If one cared to fare farther afield, a B.Sc., or Honours in Natural Science, might be achieved. Consequently, specialization involved preparatory contact with various fields of knowledge. "Men who went conscientiously through that

[1] For an earlier generation see Professor Knight, *Memoir of John Nichol*, pp. 114 f. (1896); David Murray, *Memories of the Old College of Glasgow* (1927).

course carried with them in after-life, for the most part, an intellectual mark that was unmistakable." [1] Its flexibility notwithstanding, I doubt whether the "new" scheme can pretend to the former basic thoroughness. As may be inferred, too, a majority of the students were headed for future careers in the church, law, medicine, the secondary schools, the civil services, or politics; a small minority, destined to commerce, took a "Pass" for cultural purposes. Such, then, was the educational and social perspective.

Seven subjects (the "sacred seven"), therefore seven professors in chief; we at Glasgow were in luck, the university being midmost one of those "golden ages," intermittent at all universities, I suppose. Latin was in charge of G. G. Ramsay, a first-rate teacher; Jebb, already of European repute, decorated Greek; Blackburn, in mathematics, did not count, despite his record as editor of Newton—his classes rioted joyously; Veitch, in Logic and Rhetoric, a "character" full of Aristotelian and Scots Border lore, represented the national philosophy, of which more anon; Sir William Thomson (afterwards Lord Kelvin) needs no comment; Nichol, in English literature, the best lecturer I ever heard, exerted broad and, no less, broadening influence, the more that he did not suffer fools gladly. Even so, the *genius loci* was Edward Caird, Professor of Moral Philosophy, the most ingratiating teacher it has been my fortune to encounter anywhere; and he was seconded powerfully by his older brother John, Principal of the University, foremost British preacher of the time.[2] The brothers, together with Nichol, had made the university a "veritable seething-pot of ideas." [3] Nor were the junior staff, although, in the position of "assistants" quite subordinate then, unworthy their seniors. J. H. Muirhead and Henry Jones (later Sir Henry) cannot escape mention here. The raw material was excellent. James Bonar, *Golden Bough* Frazer, and John MacCunn had graduated recently, together with not a few others

[1] The late Professor George Chrystal in *Proceedings R.S.E.*, vol. xxxii, p. 479. Cf. John Theodore Merz, *A History of European Thought in the Nineteenth Century*, vol. i, pp. 267 f. (1896).

[2] Cf. *The Spectator* (London), vol. lxxxi, p. 174 (August 6, 1898).

[3] Cf. My article "Edward Caird," *Harvard Theological Review*, vol. ii, pp. 115 f. (1909).

destined to future fame. Francis Anderson, who was to leave his impress upon Australian thought, and J. S. Mackenzie, to name two of at least a dozen lights, were still in residence. Little wonder that study ranked the "major sport," and that intense emulation—too intense mayhap—gave tone to the place. Moreover, numbers were small enough to favour intimate contacts—my class graduated seventy-seven. Then, too, the new buildings had been erected on Gilmorehill, an eminence overlooking and marching with Kelvingrove Park of some 120 acres in the West End, giving us a kind of *rus in urbe*, seeing that the population of the city (1,100,000 to-day), then about 350,000, clustered to the east and south. Westward, green fields, reminders of the country houses affected by Virginian merchants till the commercial disaster of the American Revolution, lay almost within a stone's throw; indeed, the old mansion of Gilmorehill stood its ground inside the quadrangles, finding use as an administrative office. Such, then, was the immediate *milieu*.

II

But, after all, no matter what the apparent, because present, authority of institutions and persons, national imponderables lay in wait to take toll—a most decisive feature in Scotland after the Disruption (1843).[1] The cultural tradition preserved vigour, being comparatively recent; the ferment arose soon after Francis Hutcheson's lectures at Glasgow (1730–46). He "disputed no dogma, and taught no heresy as he discussed the beauty of moral virtue, descanted on the harmony of the passions and the dignity of human nature; all this, not in dull obscure Latin like his colleagues, but in eloquent English." By the same sign, he inaugurated "Moderatism" in the Kirk, rendering the Five Points of Knox "strangely unreal." [2] Subsequent to Hume, also a "moderate," the Scottish School, "keeping to its own field, that of inductive psychology, allowed the students to follow their

[1] Cf. John Sutherland Black and George Chrystal, *The Life of William Robertson Smith*, pp. 1 f., 444 f. (1912), for the Disruption and "Moderatism."

[2] Cf. Henry Grey Graham, *The Social Life of Scotland in the Eighteenth Century*, pp. 352 f. (1906).

own convictions, evangelical or rationalistic, but training all to a habit of skilful arrangement and exposition." [1] Metaphysical presuppositions being relegated to the theologians by silent agreement, tacit norms did not come under fire.[2] The ecclesiastical cataclysm of 1843, upthrusting evangelical convictions, tended to preserve this division of labour by stress upon a practical piety masterful enough to recall the activist certainties of the Covenanters.[3] In workshop, store, and office, common life was sustained by an uncommon quality savouring of commerce with an Absolute. Hence everything ran back to mysteries too grave for discussion, yet intimating definite suggestions which forbade, not scepticism merely, but even inquiry. It is not surprising, then, that Scotland was fated to exhibit noteworthy symptoms of distress on the entrance of "modern thought" with Darwin (1859) and *Essays and Reviews* (1860).[4]

[1] James M'Cosh, *The Scottish Philosophy from Hutcheson to Hamilton*, p. 268 (1875).

[2] I have tried to outline this in Donald Macmillan, *The Life of Flint*, chap. viii (1914); cf. Henry Grey Graham, *Scottish Men of Letters in the Eighteenth Century*, pp. 425 f. (1908).

[3] For other aspects of the picture, cf. H. C. Graham, *Literary and Historical Essays*, pp. 233 f. (1908); Black and Chrystal, *op. cit.*, pp. 414 f.

[4] Sufficient time has elapsed now to make it abundantly evident that this state of affairs deflected the fortunes of Philosophy, thanks to the preconceptions swaying patrons of academic chairs. One cannot fail to remark the refusals to appoint J. F. Ferrier, at Edinburgh in 1856; John Nichol, at Glasgow in 1864 ("I know that some people are afraid of his theological views," *Memoir*, p. 189); T. H. Green, at St. Andrews in 1864 ("I have been told that, though not a monster otherwise, I carry Comtism and Materialism to a degree hitherto unknown at Oxford," *Works*, vol. iii, p. xli); J. Hutchison Stirling, and even Robert Flint, at Edinburgh in 1868 (cf. Amelia Hutchison Stirling, *James Hutchison Stirling, His Life and Works* (1912), *Life of Flint*, pp. 172 f.); and A. M. Fairbairn, at Aberdeen in 1876 (cf. W. B. Selbie, *The Life of Andrew Martin Fairbairn*, pp. 73 f., 1893); to say nothing of others still alive. Edward Caird's appointment at Glasgow (1866) presupposed favourable local conditions—he had "done nothing," as he told me—that is, had not committed himself to his harm (cf. Sir Henry Jones and J. H. Muirhead, *Life and Work of Edward Caird*, pp. 46 f., 1921). So late as the eighties, the rumour gained ready currency that Sir Ray Lankester, who resigned the Chair of Natural History at Edinburgh ere induction (1882), had bowed to an anti-Darwin storm. He has been kind enough to inform me that the report lacks all foundation. This may serve to hint that the "controversy over Darwin"

Be details as they may, a transition, slow at first, accelerating through the seventies, governed the quarter-century (1860–85) that saw my schooling. Prudent guidance and "formation of character," rather than intellectual discipline for its own sake, were featured from many professorial chairs. In any case, the conspicuous events took a practical turn, and the youth, shepherded carefully, could not sense the commonplace limits of the moral or ecclesiastico-political questions enlisting their

never became acute in Scotland; the scientific leaders, Sir William Thomson, P. G. Tait, and Clerk Maxwell, to name three, were believers in revealed religion (cf. *The Unseen Universe, or Physical Speculations on a Future State* (1875); published anonymously; the authors were Tait and Balfour Stewart). By the time it might have raised trouble, other events occupied the foreground, arousing the motion and absorbing the intellect of the nation. They were: (1) the "great mission" of the American evangelists, Moody and Sankey, 1873–75 (cf. George Adam Smith, *The Life of Henry Drummond*, chap. iv, 1898); (2) Flint's Baird Lectures (*Theism*, 1876; *Anti-Theistic Theories*, 1877); (3) the prosecution of Robertson Smith for heresy (higher criticism of the Old Testament), leading to suspension and, finally, to deposition from his Chair at the Aberdeen Theological College of the Free Church (1875–81), but to eventual victory over the narrow view of the inspiration of the Scriptures held hitherto (cf. Black and Chrystal, *op. cit.*, chaps. v–viii, xiv); (4) Henry Drummond's *Natural Law in the Spiritual World* (1883) (cf. G. A. Smith, *op. cit.*, pp. 148 f., 228 f.) The Smith case kept Scotland in turmoil for a decade. *Theism* ran through thirteen editions in a few years—extraordinary for so technical a book; Drummond sold 123,000 copies quickly, and kept on selling into the nineties. Briefly, not Darwin, but the general relations between science and religion, with special reference to theological and quasi-philosophical principles, were "a topic of most acute personal interest to thousands." Notice, moreover, that something had happened in Scotland by 1883. "The hostile criticism, which the main idea of Drummond's book had received from the Glasgow Club to which it was first communicated, was repeated nowhere more persistently than in Scotland, and by none with greater conviction than by a few of the author's closest companions" (G. A. Smith, *op. cit.*, p. 229). Edward Caird's influence told here. In addition, the fact was that Drummond had no hold upon philosophy. Further, those who were moved strongly by the *practical* religious movements of the day, tended to abandon philosophy as taught from very different standpoints by the three most powerful professors (Bain at Aberdeen, Campbell Fraser at Edinburgh, and E. Caird at Glasgow), substituting the *testimonium Spiritus Sancti*. On the other hand, and inevitably, those of us who were undergraduates could not escape the national preoccupation in ecclesiastical and theological controversy, whether we liked it or not.

enthusiasm. No doubt the relentless tide of industrialism was overtaking the middle and lower middle classes, but "social reform" had not acquired sufficient momentum to be ominous. Accordingly, the clamant problems, as men saw them then, loomed up in a theological or, as too often, ecclesiastical perspective; even Carlyle, the gleam followed by the generation of the fifties, lay in partial shadow.

My contacts with the disturbance happened to be unusual, possibly unique; for this reason my future career was profoundly influenced. My paternal grandparents, who immigrated from East Anglia in the late twenties, were Anglican by nurture. Due to circumstances irrecoverable now, ante-Disruption struggles seized them and, so far as children by adoption could, they shared the evangelical "revival," which thus gave my father his youthful outlook. On the contrary, my mother's people, scions of an old Border stock, held the "moderate" tradition (semi-Deistic), and viewed the "supreme consciousness of special election" with detachment, not to say cynical amusement. Although I never gave the matter thought as a schoolboy, it is plain to me now that I favoured the maternal strain. Moreover, my father's early contact with scientific circles, and his excellent library, led to suggestions hardly consonant with "pure" evangelical doctrine! He had certain relations with David Livingstone, of a financial character, I take it. He was greatly interested in arctic exploration, and, more than likely, this accounted for his friendship with Sir John Murray in the late sixties and, afterwards, for his connection with the *Challenger* expeditions. At all events, he rendered service sufficient to justify election as Fellow of the Royal Society of Edinburgh. This aspect of the home (a makeweight for my loss in not being sent to one of the great Public Schools, disapproved by my father) was rendered more vital by frequent visits, in the seventies, from my mother's kinsman, George John Romanes. I played *Diener* to him when he was gathering material for his *Jelly-Fishes* at our seaside cottage. As he was then in *A Candid Examination of Theism* (1878) stage, many discussions occurred whose purport would have horrified the "decent" evangelical Scot of the moment.

Then, too, the library furnished windows upon a larger world. I read Rénan's *Vie de Jesus*, Draper's *The Intellectual Development of Europe*, stretches of Grote's *Greece*, Sir Walter Scott, and, needless to recount, Paley. A first edition of Darwin's *Origin* and Jowett's *Plato* (1871) are among my early recollections—they remain among my cherished possessions. From my mother's brother, who lived near by and was something of a collector, I had news of recent books, often discoloured theologically! An English cousin, far-flung as secretary to a diplomat, and my father's brother, who had returned (1872) from a long sojourn in Malaya, brought strange tales of other lands, well calculated to stimulate curiosity, if nothing else. Hence, as a lad with some Greek, more Latin, and most French, I had boxed a bit of the compass, and believed myself a sceptic (Hume), only to be sat upon severely by Veitch and Denney (the winsome evangelical leader of after-days), with whom I began philosophical study. They riled me—nothing else! I little foresaw that the crucial years were very nigh at hand.

III

Unusual contacts despite, it is plain enough that an adolescent cannot have given hostages to thought. It is scarce less plain that, if he had reached categories, habituations were likely to have played substitute for reflection, with the result that contingencies would tend to rate important. Now, the persistence of eighteenth-century modes in Britain—the Pre-Raphaelite movement (*c.* 1860), an *early* symptom of discontent—favoured the survival of neat oppositions, which governed even those who sat in the seats of the mighty. Without more ado, then, I deem it evident that I had never encountered "the real thing" by eighteen or thereby; above all, the idea of development had not arisen for judgment. Take the political sphere as an example: I was quite unaware that, as Professor Cappon says admirably, "Carlyle's universal is far deeper than any optimistic or pessimistic, Conservative or Radical theory of life."[1] Accordingly,

[1] *Philosophical Essays Presented to John Watson*, p. 30 (1922).

there was every reason why I should succumb to the "seething zymosis"[1] of Caird's teaching.

To begin with, one was removed from the arena of fragmentary polemics to a region where the torrid onsets of current opinion fell flat. Professor MacCunn may testify for me, because he conveys the *ictus* exactly: "The effect produced on the majority of the class was as if we were witnessing the creation of a new world. The dead-weight of custom and tradition was insensibly lifted, and we felt that for the first time we had begun to see things as they are."[2] This is the unanimous testimony of pupils. And the secret? In the first place, a negative answer may serve to disperse dusty cobwebs spun since. It was not discipular Hegelianism! As I have said elsewhere, "attempt to range him with Hegel's pupils and colleagues, in the attractive rows of Right, Left, or Centre, and you find at once that he eludes your complacent attentions. The national temper and traditions of the Scot vary so fundamentally from those of the Swabian, the philosophical situation in Britain during the rule of Gladstone was so different from the speculative excitement in the Prussia of Stein and Hardenberg, that simple reproduction of the one spirit by the other is an idea too naïve for serious consideration."[3] Positively, Bosanquet has conveyed the secret in a phrase—it was "the sense of an exalted quest."[4] The breadth and significance of Philosophy were brought home to us through persistent use of the historical method backed by encyclopaedic humanism. Unyielding distinctions "subject" and "object," *a priori* and *a posteriori*, "finite" and "infinite," and the rest—vanished; the several doctrines whereof we had been making hard-shell finalities took their *relative* places in a developing whole. Venerable convictions might be modified or justified or condemned; be the consequence what it might, one must face the task of inquiry. Agglomerative or anachronistic theories must give way to forthright interpretation guided by the sense of a whole informing the

[1] Cf. Sir Henry Jones and J. H. Muirhead, *The Life and Philosophy of Edward Caird*, pp. 89 f.
[2] *Op. cit.*, p. 249.
[3] *Ut sup.*, p. 130.
[4] *Proceedings British Academy*, 1907–08, p. 383.

parts. We learned that silent, transforming influences alter and, at length, bring to light the internal significance of particular events—whether "ideas" or "things"—in a continuous process. Aught worth the names "science" or "philosophy" is an expression of the nature of those who think and, no less, of the objects of their thought. Portions of experience set over against one another mark stages, so interwoven that we proceed from relations in "reality" to comprehension of these relations by "thought." Most startling—and beneficial—for the theologically minded Scot, "any necessity for an irruption of the spiritual into the natural world would seem inconsistent with the idea that the latter is spiritual in its own right."[1] It were superfluous to elaborate further, for the revolution wrought subtly by a seminal teacher cannot be conveyed verbally to those who never knew him in the flesh. Suffice it to say that the stress of readjustment, coupled with the drudgery incident to the competitive academic system, broke my physical strength, and my *Wanderung* began.

Familiarity with French headed me for Paris, where, finding no philosophical stimulus, I gave myself to study, of the origins of Christianity especially, to mastering the spoken tongue, and, later, to reading scholastic philosophy with a Jesuit father. Four months in Rome, the ancient rather than the mediaeval city casting the spell, a couple of months in Florence, with a natural change to the story of the Renaissance, and return to Paris over a summer, completed the tale of my first wanderings. So far as I can judge, France and Italy left no mark on my thought, although they did much to broaden my equipment. Still unable for full work on return to Glasgow, but compelled to keep Terms, I heard Caird again. He was busy with the sad task of preparing Green's *Prolegomena to Ethics* for publication, and giving a new set of lectures suggested in part by this work. Due, no doubt, to the narrower scope of the subject, the first fine rapture hardly recurred. Moreover, I had diverged into philosophy of religion, and was beginning to feel that the exultant confidence in reason which had enchanted at the first blush, might be less invulnerable

[1] Jones and Muirhead, *op. cit.*, p. 181.

than I had suspected. Believing that philosophy of religion demands acquaintance with technical theology, I heard the theological professors regularly. Three were scholars of large acquirement; indeed, William Purdie Dickson, *the* polymath of the university, was resorted to by foreign investigators frequently. I garnered a great deal from them, but, seeing that none possessed what, for want of a better phrase, one may call transitive personality, I was able to pursue my inquiries in my own way, free from the romanticism of discipleship. Individualistic by temperament, I imagine this was just what I desired; in any case, it has been my habit ever since. I am unaware that my long association with Veitch, whose assistant I became on graduation (1884), left definite mark; it did compel me to give instruction in logic for a decade—no bad thing. I resided twice in Germany for some months. Lotze's massive caution and gracious manner wrought upon me for a moment; his philosophy left me cold. So far as I could make out, he joined Being to Thought ethically and, for this reason, was never comfortable with Nature. Hence, I was more affected by the example of his magnificent equipment than by his irenical temper. I continued along my own path, getting numerous knocks for my pains, but discovering that, in the things of the mind, the price paid is a large portion of value received. Possibly I was civilized enough to sacrifice immediate desires to future benefits—I trust so. In any case, I held fast to one idea which I owed to Caird—that the world is a unit, and that distinctions are artifices of convenience. For this reason and, unquestionably, because of my intellectual experience otherwise, I came to labour in border-line subjects, becoming more and more convinced that (1) "a true and valuable idealism can be reached only through the interpretation of the data of experience by the special sciences, and the reinterpretation of the results of these by philosophy"[1]; and that (2) special attention must be given to "history as ideas," with consequent elaboration of the human sciences. In other words, the more one rationalizes nature and history by research, the more one finds unsolved

[1] E. Caird in *The Progress of the Century* (American edition), p. 170 (1901).

problems. Initiation, whatever its seductive delights, deceives if it be mistaken for culmination. The inner process binding the whole is "the real thing"; and progress depends upon penetration of the symbols known to us as "events." Truth is to be found in the history of human experience or—not at all. In short, philosophy is no pseudo-science, but the temper of mind which attempts to think things together. Accordingly, if premature syntheses are to be avoided, it must wait upon "things," wait, particularly, till the sciences, human and natural, have reached a point where the philosophical implications can be dodged no longer. I presume that the practical facts of life from 1884 till 1906, say, served to confirm this attitude.

In 1886 I was appointed to the independent lectureship at Queen Margaret College (the Glasgow college for women). The double duties incident to this and to my assistantship, together with the necessity for supplementing a meagre salary, interfered with publication; on the other hand, elapsing time enabled me to conserve my spiritual independence—the main issue. After long negotiations, I succeeded Professor Dewey at Michigan in 1896. Adjustment to the enormous changes, while most stimulating, took heavy toll of ten years, during which, moreover, I became immersed in encyclopaedic work, particularly in the anxious consultations preliminary to the *Encyclopaedia of Religion and Ethics*. In this period, likewise, the deaths of my father and mother within a few months shook me profoundly.

Through thick and thin, I have striven to keep my skirts clear of all cliques, and to ensure that no pupils of mine should ever band themselves into a "school," proliferating manifestos designed to put outsiders "in their proper places." The petty world of local lights, admiring friends and, by contrast, depreciatory enemies, gets between men and their wits. Not thus, but by quiet work alone, can advances come. Another facet from my angular tradition, and I have done. Universities crave men of good will who give themselves unsparingly to pupils. Paraphrasing Goethe, the teacher who has life in him feels himself to be here for their sakes, not for the public. In our present mood, we have something to emulate in—nay, to divine from—the British on this score.

Better a mature, serene spirit than a superfluous volume. The immediate job is to persuade the youth that one's subject really matters, and, this done, the intangible reward of souls to one's hire rather than of tangible pages to one's name more than suffices. For "production" of human relations between teacher and taught happens to be the sole defence of universities against a common type of criticism. Accomplish it even in a measure, and "recognition," the itch of those who lack moral stamina, can be foregone cheerfully.

IV

Knowledge of the pit whence I was digged may help others to realize my disabilities, to forecast my spiritual voyage of discovery, not yet ended. Let me confess to a lifelong, insatiable curiosity, still strong upon me, and that, thanks to it probably, I have been and am attracted to philosophy for the light shed upon the mental and cultural experience of men. But "philosophy" and "experience" are dubious terms; the more they evade definition, the more they need to be humanized. By "experience," then, I understand everything covered by the clumsy word "mentality," which includes much besides bare intelligence or reason, a feeble though yeasty element. We must take account of temperament, character, and socialized adjustments, indeed of all factors and qualities, no matter how elusive, hidden under the deceitful label "personality." Again, your philosopher cannot divest himself of the personal equation. So, I confess impenitence regarding "philosophy." If it does not mean metaphysics, then it is hardly worth while; any "human science" might masquerade for it, contemporary fashion furnishing proof. Perhaps a little specification might be advantageous.

The confession, that one has no philosophy of his own, happens to be compatible with the circumstance that any philosophy demands individual effort and singular outlook. It is easy to say that philosophy embodies a search for first principles, or a fundamental view of things, or a general theory of reality, and so forth. If these phrases intimate that it must take all knowledge

for province, the impracticable side of the case emerges; if they hint the theoretical nature of the quest as an issue of intellectual urge, then one can echo Goethe:

> Das weit Zerstreute sammelt sein Gemüth,
> Und sein Gefühl belebt das Unbelebte.

Nevertheless, perils beset this function, and, seeing they arise precisely from the Whole or, if you please, Absolute, clamorous temptations ensue. Examples may serve to underline the point. One may agree with Mr. James Stephens that "in most poems there is an intellectual content, an emotional content, and a third content for which we have no name: what Keats meant when he said, 'Heard melodies are sweet, but those unheard are sweeter.' . . . It is that unheard rhythm which is the poetry in the poem." Similarly, in Gothic architecture, calculable statics furnish the intellectual content, the willing suspension of the stone the emotional; beyond these, however, lies the mystical "yearning to create a supersensuous world of spiritual expression." [1] Now, it is customary to affirm that the average man has a philosophy; in other words, he does adjust his affairs to a world where stable recurrences maintain themselves, and he does obey or break the controls of a socio-ethical order, sharing or antagonizing current norms. So, too, on a higher because more deliberate level, the investigator assumes and, in experiment, tries to guarantee the "thisness" of his objects, that he may generalize; in like manner, the patriot or partisan sacrifices self for "the cause." The intellectual and emotional contents are plain enough. But a Whole of some sort lurks near by "unheard"—let us admit the mystery. Dangers multiply forthwith. The pervasive something beckons, inviting capture. Hence the specious insinuation of its homogeneousness with us, and of our consequent capacity to deploy ultimate intelligibility at a word of command. Intuition, if not imagination, syncopates labour *ex datis*, and complexities are apt to be dealt short shrift. Of course, I am well aware that emphasis upon the Infinite, Absolute, Self-consciousness, Logos, or what you will, may favour desirable elasticity of thought,

[1] Cf. Wilhelm Worringer, *Formprobleme der Gothik* (1920).

tending to break down conventional distinctions with their attractive, if commonplace, simplifications. Notwithstanding, a bland suspicion lingers that lapses into rhetoric of the unutterable may occur, more comforting than illuminative. Sober reflection is in duty bound to stand them off; nay, it has so striven these last thirty years.

The insurrection against the Locke-Mill-Spencer tradition, already at high tide in my youth, presupposed this dynasty, historically remote to-day. A later generation may judge it to have overshot the mark, like all revolts. Hence, the "decisive rejection of representative ideas in favour of directly apprehended unities" bred a fresh revolt, often termed "new"—a recommendation, I presume. As a matter of fact, some of us, being recalcitrant pupils, felt its undertow forty years ago. I recognize the difficulty of dealing with a past marked by extraordinary discontinuity, but plead that I am asked to make my confession. Well, I felt in particular that the opposition between an external "material" world and an internal "spiritual" world might have been overcome too cavalierly; that formulæ and true categories might have been imposed upon phenomena arbitrarily; that refractory events might have been pigeon-holed when not neglected. I knew that in the name of *geistliche* order, a vast web of deduction had been spun whence escape, however embarrassing, had become imperative. Be this as it may, the quest of the *Epigoni* for unity was not immune to change; no cause for wonder, when the numerous discoveries and hypotheses in the physical, biological, and social sciences, to say nothing of psychology, are recalled. Nor is this by any means the whole tale, for we dare not omit reckoning with the progressive secularization of life, which has played a rôle of greater magnitude than is recognized in some quarters. Consider that "whatever the implication of it may be, it is true that almost any sixty-year-old [i.e. till *circa* 1860] collection of letters deals very largely with theology, whereas any similar modern collection does not do so at all"; or, going into a very different gallery, con again the "Concluding Remarks" to Bradley's *Ethical Studies* (1876). And, if you care to jump a long century, take a Statute of the Seatonian Prize (1738) at Newton's

university: "Which subject shall, for the first year, be one or other of the perfections or attributes of the Supreme Being, and so the succeeding years, till the subject be exhausted." With such prepossessions, it was altogether explicable that the intelligibility of the universe should have been taken for granted, if not baldly, then with grateful optimism; that the natural inference to a regnant intelligence should have proven congenial; and that, with this temper abroad, the doctrine of the "subjection of all things to the Divine Logos" should have been held to vindicate the "witness" of the thought of man to the thought of God. Briefly, a faith, the more vital that it was itself a protest, blossomed forth as a consistent, rational account of the ultimate. Thus, a very ancient temptation gained new lease on life; the presence of the Logos overshadowing, changes shrunk into their shell abashed, and human spontaneity seemed to receive undue chastening. Accordingly, despite powerful contrary influences, I was prepared to consider objections with an open mind, if not altogether to see to it that criticism, however unavoidable, might be sympathetic, even generous, to its own gain. In a word, natural dialectic was bound to take its ironical course. What more natural than a reversion to Hume! It was evident that many developments were conspiring to resuscitate his caution: "So narrow are the bounds of human understanding, that little satisfaction can be hoped for in this regard. . . . Indulge your passion for science [says nature], but let your science be human, and such as may have a direct reference to action and society. . . . Be a philosopher, but, amidst all your philosophy, be still a man."

The persistent diremption of experience favours "half-and-half" standpoints. An eminent physiologist said to me once, "If only our science were like physics, we would get somewhere." He had in mind rationalistic completion dependent upon an "absolute" *terminus a quo*: a substantive something, proof against human fallibility, furnishes the firm foundation. In like manner, the doctrine that "Truth" belongs to a non-human universe, whence it is thrust upon mundane events, derived warrant, if not authority, from the opposition between Appearance and Reality

Demurrers were in order forthwith on both counts. To begin with, when one comes to "matters of fact," are indubitable necessary and universal truths possible? Psychology drifted toward the negative, and the denial had been accentuated by the tendency of evolution to obliterate distinctions held inviolable by classical science and philosophy. "The sciences are coming together" and, as an accompaniment of their synthesis, the continuity of man with "external" things, with other organic beings, and with society was blazing fresh trails. The One and the Many, Flux and Being, returned from a dim past to confrontation by stern judges who said that, as perdurable forms beyond experience, they are so much moonshine. Emerging from severe discipline in history of philosophy, and from the deliquescencies of *religionsgeschichtliche* theology, one was receptive to the American suggestion that "the brain often runs away with the heart's best blood." Moreover, these were the brave days when Schopenhauer seemed to merit serious attention, when Nietzsche swung scintillating athwart the horizon, when William James's *The Principles of Psychology* aroused joyous, if unholy, glee in the natural man. Perhaps a valid, because concrete, order might be descried did one bethink him of actual human activities. Influences unfavourable to systematic philosophy were telling their tale, the emotional was asserting its rights, and romanticism attracted, allowing room for idiosyncrasy. The soul had starved on the rich food offered to the mind. "Die Scheidewand zwischen Fabel und Wahrheit, zwischen Vergangenheit und Gegenwart ist eingefallen: Glauben, Phantasie und Poesie schliessen die innerste Welt auf." Problems that admit neither solution nor escape held the foreground for a time, spiritual and practical freedom having been set by the ears. In vain: once more the suspicion would not down, that the scale of man's universe was being missed. Dodging Nietzsche's "spiritual rat-catchers," one had merely wandered into a world where Nature makes nothing but leaps. To wit, our world is "on the make," in so far forth it *is* a world where practice spells betterment, if scarcely perfection; in any case, adaptations supervene. Hence, whatever our hypothesis about the relations between *sensa* and thought, our concern is with empirical par-

ticulars, never with alleged universals, and, fitness being the test, truth reduces to economic grip of the opportune. A prudential relativism may compound for and with the sins of the whole people. To make a long story short, your adventure among the workaday will amount to achievement of truth. This gained, you need not care if you substitute a nostrum compounded of moralizing, scolding and, be it said, gossip for the spacious *afflatus* of perplexed Teutons; if your utilitarian diligence, cumbered about much serving, lacks distinction; if your contempt for history runs to the new for novelty's sake; if you handle high issues crudely, intent upon temporary advantage. As a romantic Dionysus playing hob with the eternal verities, you cut a fine figure—but, after all, are you more than a successful functionary, shouting *solvitur crambo*? Truly, grave misgivings perturbed. Admitting to the full timely reminders loosed by the "moderns," the fact remains that a point of reference, a universe, will not down. Definite rejection of one theory of knowledge, the copy theory, say, removes no ultimate problem, and the thin air of individual consciousness proves too rarified for persistent norms. The humanization of knowledge, genial though it be, may have cost too much. For a world "more meant against than meaning" has its revenge in the reduction of values to mere approvals or disapprovals.

Approaching from the human side, it is natural to conceive experience as the sphere of desire and, mayhap, perfection—a full-orbed world in miniature, entrancing its immediate denizens. But queazy moods follow when, psychological deliverances seeming arbitrary, we scent victimization by vague, perhaps irrelevant, opinion. Thereupon dialectic swings away from

> A doctrinal and witty hieroglyphic
> Of a blessed kingdom

to the rigid outlines associated with substantiality. Granted that accident produced social arrangements, and that the sciences of society linger in the rudimentary stage, are we not driven by cautious opportunism itself to seek securer footing? Profuseness, chaos, even anarchy, may be masked by "working conceptions";

but a reliable vehicle independent of Mind or minds, with principles of its own unaffected by psychological states, portends deliverance from arbitrariness. Concrete realities replace discontinuity and dependence here, and this not by any rationalizing magic in the temper of eighteenth-century materialistic utopianism. Betide contingencies how they may, Science progresses, and can be drafted to furnish stability. Things are not amorphous, and "natural law," thanks to the wonderful extension of the inherently calculable, bestows a "closed system" promising certainty. The weary generation of the nineties, having had its fill of disconcerting men of to-morrow, sought relief from flinging "sentience," "ideas," "actions," "values," and what not into the pot for luck. The reign of law might be risked for the benefits of practicable limitation—*in der Beschränkung zeigt sich erst der Meister*. Moreover, once safe within the laboratory, a succession of engrossing technicalities will ward off delusions of grandeur. We even dare be fussy, and yet remain admirable in modest veracity about emergent discoveries. To what purpose?

Great as are the satisfactions to be derived from progress in "natural knowledge," they nevertheless leave *the* problem unsolved, both ends out of sight, never out of mind. For, if one abandon the major general questions in favour of mastery over special cases—one merely abandons them! If conclusions commanding universal assent be obtainable, the more tenuous the content which the assent supports. "Laws" of cycles (e.g. conservation of mass, gravitation), like statistical laws of, say, gases, avoid, and properly avoid, the "will-o'-the-wisp" of ultimates; indeed, I understand that they throw no light even upon *quanta*. If biological investigation be stabilized by adoption of the physico-chemical hypothesis, mind still eludes. If attention be concentrated upon *systems* of particulars, evidently objects which, as inferred, are at least as important as those perceived, remain for judgment. If we "progress backwards," referring every phenomenon to a lower-grade predecessor as sufficient explanation, what becomes of our Evolution, which involves "new" consequents? If categories themselves be "non-mental," what *can* be said of mind? Then, too, must one reduce human history

to a mere succession, on the *schillrend* ground that it does not repeat itself; or are we at the old game of appeal to a simple transcendent? Are we pleading preoccupation with method or, if not, just indulging hardy conjecture? In sum, then, we *are* limiting ourselves to white and black, to light and shade, neglectful of deeper perspective. And this turns out unsatisfactory, for, after all, modern science seems fertile in broad hints that the universe depends much more upon mind than we had dared to suppose. In any case, insistence that attainment of truth must precede every other aim is a two-edged proposition—entirely outside scientific inquiry, on the one hand, and, in addition, itself an open question, on the other. Thus, the "appeal to fact" threw me back upon the "second remove from fact," warned, however, against some dangers of traffic

> With the land that produced one Kant with a K,
> And many a Cant with a C.

This synoptic retrospect no doubt points a moral plainer to veterans than to recruits, for it savours of the doubts and despondencies which, the age controlling, have assailed one for forty years, and led to numerous blunders. The perfervid expectations characteristic of the great post-Kantians, equivalent almost to an evangel, had faded; challenges like the *Aufklärung*, or common sense, or "Force," or "Matter" were no more. In fine, the dynamic prospect of a fresh era consorted ill with a period of disintegration. The attraction of spiritual things, diminished by the allurements of political, industrial, and naturalistic concerns, seemed a philosophical hindrance to some. Preliminary, if not quite subsidiary puzzles, hypostatized in special disciplines, were preempting the foreground. Avid for "new material," we had bogged ourselves in erudition (*mea culpa*). Fragmental systems, relevant, of course, to portions wrenched from experience, eclipsed the system of the Whole, and we pawed over sensibilities, especially the sensibilities of our abnormal neighbours, in place of trying to understand life. We all belonged with the Afterborn—not that we were *laudatores temporis acti*, much less disciples; rather because, in explicable bewilderment, we played King Log

to fundamental problems. Habituation to specific spheres, fenced off as private claims by "expert" groups, tended to discourage bold demand for harmony between the warring factors of experience resultant upon constant analysis. Above all, sense of ignorance in face of unsuspected complexities manifest alike in thought and nature, enfeebled will to synthesis. A "subjective" and a "natural" unity appeared compossible, but larger integration abashed—perhaps it was beyond reach.

Nevertheless, it would be folly to sit down and cry over spilt milk, as if the recent past had been resultless, mistaken, or even fatuous. Agreed, there is nothing like general acceptance of any philosophy as true and, till a common doctrine disengages itself from the present welter (as has happened before), this confusion may or must persist. On the other hand, the diremption of experience has been accentuated, masses of information have come to light, which await the process of rethinking, and flat uniformity is out of the question. Stated otherwise, the departmentalizing of the world is serving a purpose in so far as it renders organic to experience many things hitherto held "external" or non-significant or negligible. As a result, we are bound to read the immanent cypher on a broader, profounder scale when and if the general spirit moves. As always, perspective will take care of itself. Some bemoan the emphasis upon science. Well, the "scientific period" is not new, seeing it dates from the seventeenth century, when Galileo, Kepler, Harvey, and Descartes seized the torch for transmission to Newton and Locke, whose profound influence upon Leibniz and Kant made the "reign of law" a vital issue. Popular estimate notwithstanding, Darwinism left things where they were. Generalization of "law" raised interesting queries about evident gaps and possible exceptions; the essential problem loomed up the same, if vaster and more complex in detail as sciences displaced Science. Nay, while speculative thought petrified on the convenient level of this or that naturalism, the ultimate difficulty posed itself the more in the old way. Opposites crystallized in separation, their mutual entanglement missed amid manifold "research," and heaping information, impressive in itself, melodramatic in its practical

applications, took the place swept and garnished by historical criticism. Competing types of naturalism united, however, by the dogma of an "objective" order alien from yet determining all human activities, held the field for a moment; whereupon valuation theories arose to conserve a *punctum stans* whence, brandishing his ideals, man might hurl defiance at the inimical or heedless march of nature. Our temptations and, at a pinch, recourses were subordination of thought to the stream of things, with relief in exploiting curiosities, always in the naïve hope of getting knowledge; or postulation of a law for man—his very own—with appeal to "axiology" where Worths, whatever their pretensions to universality, could be "explained" as accompaniments of local or temporary conditions, and could therefore be conscripted as further proofs of the naturalism they were designed to offset! No matter how suggestive, nay, comforting for the nonce, they merely served to cloud the fundamental issue—that of παντελῶς ὂν παντελῶς γνωστόν or, better, of the *Noûs* considered as ἀρχή and τέλος alike. The very terms hint the age-old, insistent scope of the philosophical quest. Not that philosophy must "go back," but that it must surmount its timidity toward a process and attitude far different from those of science.

V

This recital, more engrossing doubtless to the writer than to the reader, may close with a few tentative remarks.

The notion of "progress," especially of continuous progress, is abandoned, for the simple reason that man progresses by deepening of spiritual insight. Besides, paradox though it be, the means devised to guard results often get between men and their real selves. To take a case. Since 1840, we have been reproducing, if on a larger scale, the ferment of the period from Ficino to Hooker. Similar tendencies toward "naturalism," similar confusions, and a similar disposition to slur, if not minimize, the problem presented by man's double nature, have prevailed. The need for a synthesis such as the post-Kantians formulated, but freed from their soaring romanticism, has come full circle.

As concerns dominant ideas, there would seem to have been but two epochs: Greece, with culmination in Plato and, for certain aspects, in Aristotle; Mediaevalism, with culmination in the Scholastic system and Dante. To say that the two were mutually exclusive would be to strain the truth; still it is clear that the "pagan" underlined what the Roman Christian depressed, and vice versa. We have now reached the stage of a reinterpretation, where the chief interests of each confront one another, their respective implications more fully evident. The Greeks founded science. As with us, so with them, the determined attack upon empirical questions developed outside, possibly beyond, the sanctions of organized religion. A recoil was to be anticipated and it is full-throated early in the millenarianism of "the day of the Lord," due "to come as a thief in the night."[1] This universe of discourse, with every bound and aspiration, finds final expression in the *Divine Comedy*. Human curiosity has been trying to recapture Greek objectivity ever since, aided yet hampered by wealth of detail and consequent acute consciousness of difficulties unknown to the ancients. We still yearn for a synthesis in their temper, not rejecting succour from the Ages of Faith, our deep disturbance by the sense of an "unexplored remainder" impelling. Reverting to our wider knowledge: "The lifetime of a fixed star is estimated at approximately one million million . . . years, a period so long that the whole duration of the world's history from the days of the ancient Egyptians down to our own time amounts to not even one per cent. of the millionth part of the life-history of our solar system."[2] This granted, we can but agree with Lotze, "how universal but, at the same time, how subordinate is the part which mechanism plays in nature."[3] "Objective" reality is evidently mixed, and no part torn from relation to the Whole satisfies, however unitary. Your star-history, vastly homogeneous and quantitative, cannot say to your Egyptian-American history, minutely heterogeneous and qualitative, "I have no need of thee." "Matter" may be "everlasting," but so are the rules

[1] 2 Pet. iii. 10.
[2] A. Haas in *The Scientific Monthly*, February 1928, p. 145.
[3] Cf. *Metaphysic*, Book II, chap. viii.

enabling this predication; indeed, as man interprets them, they attract him because they furnish a simple or "closed" universe of *Erhaltung*. Seductive as immanence on this wise may be, it remains thoroughly abstract. The post-Kantian doctrine of a transcendental power internal to history, whereby the individual is transmuted by the presence of the universal, posed the metaphysical problem, concrete by comparison because revealing the possibilities of *Entfaltung*. Far from external adjustment or composition, we have another issue—"creative," if you like—in any event, commanding recognition of fresh imponderables.

Following upon the double-entry philosophy of the seventeenth and eighteenth centuries, the question of synthesis became so urgent as to overwhelm other considerations between 1795 and 1840. Thereafter, Lotze the single serious exception, this was deserted, then flouted through two generations. The "claims" of the mechanical and the spiritual aspects of experience, having taken their several ways separately, are upon us again, with the result that the task attempted by Aristotle, Kant, and Hegel has developed new urgency. It is necessary to set forth some defensible scheme embodying the irreducible attitudes of thought whereby men overleap the limits set by common sense and the particular sciences. We have shirked the metaphysical presuppositions incident to moral and religious conviction, postponing them in favour of study of the phenomena of nature, of history, and of psychological process, to the exclusion of *Geist*—or whatever you care to term the most inclusive order knowable by man. Symptomatic of this, there has been much uncritical employment of fundamental general ideas when dealing with individuation of "natural facts"; so, too, in psychology, in the human sciences and, we may as well confess, in epistemology. What avails it to treat the "subject," and even the "object" analytically approached, as if they were merely *continua* and nothing more? Why should we cozen ourselves into supposing that endless composition and concrete organization *are* identical universes, presented under identical categories? Partial systems, excellent prefaces as they may be, deceive when they masquerade

as complete or, worse luck, the sole totalities. Let information proliferate as it may, philosophy cannot forgo assault upon the primary difficulty. Itself a stage bound to change and pass, it bids us rest content with nothing less than the boldest application of an immanent principle which, no matter how intimative of an "unexplored margin," is not antagonistic to, because rooted in knowledge of the muddy vesture. But, imagination and faith suggesting, it would urge inclusive vision, seeing that spiritual things are as veritably part of man's reach as the commonest details recognizable by irreflective sight. The reaction against science, as it has been called—whether "idealistic" or other boots little—brings the two types of system to confrontation; not without hope of advance beyond dour opposition, seeing there is a mutual emphasis upon immanent principle, whether the object examined be the "natural" or the "human" world. Under the circumstances, quest is the sole path to truth; its *stadia* are Truth: in so far forth we *have* it. Solution of the problem must be correlative to comprehension of it; we can but seek soberly for coherence, eschewing confident remarks on "ultimate" reality.

The untidiness and unpredictableness of life persist; but so do human ideals. Consider ordinary folk, especially those who know how to keep their heads and tempers, betide what may. Faithful to an ideal, they have attained just what philosophy would compass—serene rationality. Their mastery bears intimation, for it hints a region beyond the changeful fashions of theory, yet undisturbed by distant profundities. Face to face with the permanent in them, we admit that we know neither whence nor how comes the insight capable of saving man from his dire predicament as a feeble or, in moments of rude strength, ferine mortal. For this very reason, one is suspicious of all, sceptical about most systems promising immediate realization of the philosophical aim—explanation of *our* universe (never *the* universe) in terms of human consciousness, and implying that personality on its "creative" side provides the best clue. Such a view may well be true or, again, it may be illusory. But these judgments miss the mark if the position defies outflanking.

Contemporary Manichaeism, overborne by the "large injustice" of Nature, forgetful of the Great Mother, serves to warn that "creative" personality may not be identified offhand with the God of religion. In a realistic age, the host of heaven, earth an inconsiderable partner, play the leads, puny mortals momentary and powerless by contrast. Admirable, even platitudinous, this view happens to be off focus when one elicits the ideal dimension present even in human triviality, whence the commonplace derives splendour. Philosophy seeks atmosphere and perspective in this quarter, because only thus can it escape "reality" become a *caput mortuum*. Taking manifest human discontinuities into account, the formidable and persistent problems concern unification of knowledge and its relation to faith. The key lies in the nature of the ideal. What factors are to be designated "bodily," what referred to "mentality," is a preliminary, mayhap a minor question of information. Information, with the practical applications resultant upon it, may effect much to mitigate our earthly lot; they cannot save us from ourselves, because powerless to save in the right way. We are just learning this as our material civilization speeds its headlong course. We are beginning to ask, Are we, then, in any respects better or wiser than our "slow" ancestors? More changes are said to have occurred since 1840 than in the preceding millennium; at what price? Be all these as they may, the most inclusive Whole conceivable belongs in the region of the ideal. If you project a theory of reality, the ideals embraced and subserved by men will surely confute it, unless you have allowed for their dynamic centrality. The more certain —and abstract—your "system," the less significance it is likely to bear in a final summation. From this point of view, ideals constitute the fundamental problems, and relevant statement, alterable though it may be by accumulation of contingent *data*, is more than half the battle. Quite probably, greed for "new" angles of approach, pervasive in a time of confusion, makes too many concessions to various temporary attitudes posing as "common sense." Nevertheless, the helpful or apposite angle sifts itself out from time to time. The saint does evoke things of good report, the artist does evoke loveliness; less fortunate,

the philosopher attempts to evoke truth. None of these evocations are susceptible of proof, proof being superfluous! In the beginning and at the end, the thinker imposes belief upon himself. Idealistic in the sense suggested, his idealism is always *aborning*, never altogether born. Seeing that ideals are polymorphic, the quest after unity never ceases, and it never needs to begin. Partial unity being an eternal present, disillusion takes to flight before authoritative, tenable conviction. Approximation is afoot and, to this extent, the ideal manifests inherent objectivity—a satisfying prevision. The prevalent immanence dictates the condition of any possible transcendence, the one actual, the other ever actualizing, both together attesting a definite nature, which happens to be the only Whole that can furnish all the terms indispensable to a rounded interpretation.

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CONFESSIONS

By FREDERICK J. E. WOODBRIDGE

Born 1867; Johnsonian Professor of Philosophy, Columbia University, New York.

CONFESSIONS

As I review the course of my philosophical studies and attempt to express the conclusions to which they have led, I am conscious of special indebtedness to Aristotle, Spinoza, and Locke among the dead and to Santayana among the living. It is to them that I repeatedly turn both for refreshment and discipline. They represent, I may say, a selection or survival from the forces that have influenced me rather than a sequence which my own thinking has followed. I cannot name a date when they were first recognized as controlling. I know, however, that when I began teaching at Columbia University in 1902 Aristotle, Spinoza, and Locke had already become the philosophers in whom I was most interested, and Santayana appeared to me as a brilliant and provoking writer. After reading his *Life of Reason*, which I reviewed for the New York *Nation*, I felt that I had found in it a matchless commentary on our human thinking. Since the contributions to this volume of essays are admittedly personal and egotistic, I may as well say now that the *Life of Reason* is a book I wish I could have written myself. I do not ask Santayana to take this as a compliment, for it is a doubtful one. I make the confession to indicate that his book is the kind of book which appeals to me as genuinely philosophical. For as I understand the *Life of Reason*, it makes no attempt to explain why the life of man should be intellectual. It attempts, rather, simply to tell the truth about that life. And telling the truth about the life of reason and trying to discover what that truth implies seem to me to be the business of philosophy. I had reached this conviction before I read the *Life of Reason*, but after reading it the conviction had received a force and an illumination which it had not had before.

And more than this; my understanding of the history of philosophy seemed to be enhanced. I felt that I could enter into the thoughts of others with a keener and more sympathetic appreciation. Indeed, if I may use a chemical figure, the reading of Santayana has acted upon my own thoughts like a catalysing agent, dissolving them and recombining them in ways better

suited to my own satisfaction at least. Two examples may serve as illustrative. When I read, "With Aristotle the conception of human life is perfectly sound, for with him everything ideal has a natural basis and everything natural an ideal fulfilment"—when I read this, not only did the disorderly writings of the Stagerite combine together to produce one impressive effect, but what I myself had been clumsily feeling for received a clarified and satisfactory expression. In that one sentence was revealed what certainly seems to be one of the major tasks of philosophy: to exhibit the passage from the natural to the ideal; from common sense to reason; from animal love to ideal love; from gregarious association to free society; from practice and invention to liberal art; from mythology to enlightened religion; and from crude cosmologies to that impersonal objectivity found in science. In that one sentence, too, I found an acceptable standard of criticism, for it seemed to me that ideals are significant as they round out and complete some natural function, and that the natural, when cut off from the ideal, must not be looked upon as affording by itself any standard of conduct or reason for its existence; it is brutally impersonal. And when I read, "Knowledge is not eating and we cannot be expected to devour what we mean," I found the vanities of epistemology exposed more conclusively than any laboured exposition of my own had exposed them. I could have insisted that "knowing a world" and "having a world to know" are never the same condition, but I could see it better with the metaphor to help. To these illustrations I may add that reading and re-reading the *Dialogues in Limbo* has become a prized experience in the clarification of my own ideas. I must rate that book very high in the philosophical literature I have read.

I have dwelt on my indebtedness to Santayana first because of its especial character. The basic ideas of "my philosophy"—I use the phrase conscious of the egotistical privileges of this essay—were laid before I read him. Perhaps it would be more modest and even more truthful to say that I think they were. The thing, however, of which I am acutely conscious is, that through reading him I seem to have won for myself greater freedom and clarity

in the handling of my ideas. I think I know better what I am about. The scheme which was forming itself in my own mind through the study of Aristotle, Spinoza, and Locke in particular, became more definite, and it became easier, for myself at least, to formulate the chief conviction to which that study had led. A synthesis of Aristotle and Spinoza, tempered by the uncompromising, yet compromised, empiricism of Locke, became something which I thought I clearly conceived and which I believed to be useful in removing some of the confusion for which modern philosophy seemed to be clearly responsible. Aristotle's thoroughgoing naturalism and his conception of productivity, Spinoza's rigid insistence on structure, and Locke's doctrine of the acquisition of ideas through experience, seemed to afford, when taken together, a means of backing up the philosophical enterprise with a metaphysics which would be analytical instead of controversial. If effective ideas are really acquired through experience, an analysis of these ideas should reveal something about the world in which that experience occurs; and the chief revelations seem to be a limiting structure or structures for all events and a genuinely productive activity within these limits. The structure determines what is possible and the activity determines what exists. But this result should not be taken as an absurd dualism which starts with two gods and then produces a world through their co-operation. Structure and activity are things implied by the fact that the world is known and controlled by getting ideas through experience. They are arrived at analytically and are not invoked as demiurges to account for the world we live in. The development of a germ into thoughtful consideration of its habitat and of the manner and incidents of its development, is the basal fact for every philosopher. He can never get behind it. He can only tell the truth about it and try to find out what that truth implies. He may explore his world and control it in some measure, but he can never find originals which brought it into being.

All this at the age of sixty seems to me to be so simple as to need no elaboration. One's familiarity with one's own line of thought begets this illusion. I have to confess—like every other worker in these mazes of thought—that I have entertained in the

past, with entire conviction, opinions which I can hold no longer. This, if nothing else, should make me recognize that what now seems so clear to me may not seem clear at all to others, and that I myself may be among those others at a later date. Yet I venture to think, even if so thinking savours of contradiction and dialectic, that the principle of hesitation which I have just expressed is an essential part of the position to which I have been led. Hesitation, doubt, perplexity, uncertainty, the sense of incompleteness and of more to be done, the prospect and probability that one will change one's mind—all these things are as real as anything else. The doubtful man is as much a product of nature as the confident. Indeed, nothing that happens can be convicted of impossibility. There must, consequently, be room in one's metaphysics for anything that may happen. This I take to be a very solid principle. We may condemn philosophies as false, but we cannot impugn their existence. It is easy to claim that men ought not to think in certain ways and forget that they do think in those ways. Their thinking may be improper, but it is clearly not improper from the point of view of its existence or as an illustration of nature's productivity. From the point of view of existence one might as well accuse the diversified flora and fauna of the earth of impropriety. The principle, therefore, that there must be room in one's metaphysics for whatever may happen or that nothing that happens can be convicted of impossibility, seems clearly to imply that our distinctions are distinctions within one common field and not between two fields which the distinctions make incompatible. Rather clumsily expressed, they are distinctions "within" and not distinctions between "within and without." Appearance and reality, truth and error, good and evil, beautiful and ugly, are all correlative. An existence which did not own them would not be our existence. A metaphysics which abolished them would not be a true metaphysics, but it would demonstrate them. Even in being false it would have a claim on existence. I could boast that my metaphysics recognizes this, making it a cardinal principle. Rather than boast, however, I would make this the first step in metaphysics—the recognition that existence is primarily what it is

and can neither be explained nor explained away. The most that can be done is to find out what it implies. And the great error of metaphysicians is the supposition that the implications of existence are its causes and lead us to something more fundamental than existence, or prior to it, or in itself irrelevant to it.

I have, consequently, often called myself a realist, and one of a very naïve sort. But calling names seems to have parallel consequences, whether oneself or others be the object. One is not always comfortable with one's associates. The linking name is not a marriage ring symbolizing community of bed and board. Yet I confess a sympathy with all realists of whatever stripe, even the mediaeval and the literary. They are evidently trying to see things as they are, even when what they see is selected. Novelists often tell us what real life is by telling us about some unfamiliar life, and philosophers also often discern real existence in the unfamiliar. The realism I would urge is one of principle rather than one of selection. As a principle it does not dichotomize existence. There is, for example, an ancient question, whether a rose is red when it is not seen. The answer always has seemed to me to be: a red rose is. The colours of roses are not like guesses in Blind Man's Buff, and many a rose is born to blush unseen. I can attach no meaning to the question: *Is* the colour of a rose what it is? I am too sensible of the fact that I have bought bushes of a nurseryman who—nor I—have not as yet seen the roses they will bear. Such experiences may drive us back on the general fact of colour and lead us to ask: Do colours exist when they are not perceived? It is hard for me to attach a meaning even to this question. A dark room may exclude all colours save black when the eyes are open, and a similar effect may be produced by binding the eyes in a lighted room. And this simple experiment forces me to conclude that colour is as much something with the existence of which I have nothing to do as it is something with the existence of which I have something to do. When I try to find out how much I have to do with it, I find that much very little—no more than the fact that if I did not exist, I would never ask such curious questions. I would not ask any questions at all. And I cannot possibly conceive what a world is like about which

no questions whatever are asked. Furthermore, it seems monstrous to me to conclude that *the* world is only *my* world, for "my" world means nothing unless distinguished from a world not mine. I may distinguish such a world just as I distinguish houses which are not mine. A metaphysical distinction, if made at all, must be of a similar kind, or it is meaningless. This is what I mean by a realism of principle rather than of selection. As I am fond of saying, the only universe relevant to inquiry, the only universe that exists for purposes of observation, experiment, and ratiocination, is the universe of discourse. Any other universe is meaningless. If I am challenged to prove this, I point out such obvious facts as this: we do not proceed originally from the implications of colour to colour, but from colour to its implications. The subject-matter of inquiry cannot be called in question. Individual existences may be related to one another and compared, but "the whole of existence" can be related to nothing or compared with nothing.

This is the basic dogma of metaphysics. I cannot remember when it first gained possession of me. I am tempted to think that I always thought that way. I remember quite distinctly that when I first read Berkeley, which was in my college days at Amherst, I was troubled over the conflict between the incredibility of his doctrine and the obvious truth of its foundation. Looking back now at the experience, I can formulate it as I could not have formulated it then: I was conscious that he converted a definition of subject-matter into the cause of its existence. He saw clearly enough that existence implies mind in some objective sense, but he made mind the creator of what exists. In those same days, I had a similar experience with Kant, but it was many years before I could say that this synthetic philosophy was anything more than a definition of subject-matter converted into a wholly incredible explanation of experience. And the little I had then of Hegel—getting his ideas, not through reading but through the fascinating exposition of Professor Garman—fired my imagination as a little of Hegel did that of many of my contemporaries. Glimpses of the organic unity of experience were inspiring for minds distracted by an

associationist psychology on the one hand and the artificiality of the "critical philosophy" on the other. We read no Aristotle in those days, and it was only later that I saw that Hegel had done little more than turn Aristotle upside down and done it clumsily. I am conscious of such early experiences and such later formulations, but conscious of them as a pretty steady and natural development of my thinking unmarked by a sense of violent conversion. This development seems to be a line along which I have been led rather than a programme ever deliberately adopted. This seeming may be one of the illusions which I egotistically cherish, but I set it down with the frankness which confessions like these inspire.

I could cite other things more casual, perhaps, than those already mentioned. A remark in a cherished copy of Jevons' *Lessons in Logic* stands pencilled with a question mark: "We cannot suppose, and there is no reason to suppose, that by the constitution of the mind we are obliged to think of things differently from the manner in which they are." There is a note to the remark: "Discuss light, colour, sound, etc." The book is a heritage from college days and carries the name of a class-mate. I must have purloined it. The question mark and the note were put there when I taught logic at the University of Minnesota. I was very conscious of the hopelessness of an obligation to think of things differently from the manner in which they are, and ended a contribution to the *Essays Philosophical and Psychological in Honour of William James* with the remark of Jevons. When I read, shamelessly, as youth is wont to do, the *Essays* of Matthew Arnold while Professor Shedd lectured on Dogmatic Theology at the Union Theological Seminary, there was tucked away in my memory one of Arnold's favourite quotations: "Things are what they are and the consequences of them will be what they will be; why then should we wish to be deceived?" So I take the principle of realism as something pretty well ingrained and constitutional in me. Like everybody else, I pride myself on a sense of fact.

I have tried to support this pride by teaching and by the little I have written. The principle of realism seems so important to

me for metaphysics and philosophy that I have been more busy with championing it than with developing it. Yet to keep insisting on it seems worth while. It helps me not to wish to be deceived. If this world were *explained* as so many of us philosophers try to explain it, it wouldn't be this world at all. It may cry for an explanation, but a metaphysician in his wish not to be deceived will set that down as one interesting fact about it. He will see poetry and religion, and art and society, and morals and science and philosophy even, as responses to that cry and be glad and not contemptuous of them. He will recognize them *as* responses, confident that when they cease to be such, there will be no more world. The cry is essential to what existence is. Nature has generated and supports it. With Aristotle we may make it the evocation of God's bare presence and rest content with that, for God is a rather final explanation of things. But if we do not wish to be deceived we will not make him the creator of the world, responsible for microbes and men, or try to deduce from his nature the way of a man with a maid. We may insist with theology that he must be incarnated, born of a virgin, even, to be as effective with men as he is with the stars, but we will recognize in that insistence a supreme illustration of the cry. The appeal of existence will not have ceased. First and fundamentally it is an appeal.

To find it first and fundamentally something else is to acknowledge oneself a selective realist rather than a realist in principle and to have chosen one instance of the natural kinesis instead of the character of them all. Matter, atoms, space and time, ions, electrical charges, the stable bodies and rhythmic motions of the physical world, the microscope's revelations of the mutations of the seeds and carriers of subsequent developments, and the natural evolution of living organisms, must bulk large in one's thinking. They make an imposing spectacle, suited to arouse both the admiration of a poet and the curiosity of a scientist. It is trivial to ask which treats them the more adequately unless one specifies the purpose for which they are treated. The heavens declare both the glory of God and an opportunity for astronomers. They declare neither exclusively. If we look for an exclusive

declaration, it is found, not by selecting one from a number, calling the one real and the others illusion; it is found rather in the steady recognition of the fact that something is declared. This is but saying again that existence *is* what it reveals itself to be to a seeker, without addition or subtraction. And this may be turned around. It is the seeking of what existence reveals that defines the unity in existence and discovers the manifoldness of its revelations. This shows again how metaphysics is realistic in principle. At the risk of seeming to talk nonsense, I may say that the question, What is existence? is an existing question, one thrown up in the operations of nature, an event in the world fully as much as an eclipse of the sun, but more conspicuous than the latter. Familiarity with it may breed contempt. It is not, however, to be set aside and neglected. For man does not stand outside of nature and ask her questions. He stands inside. His questions well up within him, form on his lips as naturally as his smiles, and are as much a revelation of existence as his answers are. They are more. They are the final revelation of existence, declaring it to be—for metaphysics at least—first and foremost a question. When this is seen, the metaphysician need not hesitate to see a question answered in the growth of an acorn into an oak or the revolution of a planet about the sun. He may even go so far, running the risk of being laughed at as a poet or lover of metaphors, and say that acorn and planet have asked questions and found answers. At any rate, existence seeking will be for him a more impressive fact than existence found. That is why he will not put the inquisitive mind outside of nature and suppose that it is obliged to think of things different from the manner in which they are. He will keep it inside as the sure indication of what natural processes are, and if he finds an atom, he will not let the little thing drive mind out of nature and make of mind a problem never to be solved. He will gladly be something of an Hegelian and more of an Aristotelian to avoid that disaster.

All this, as I have said, seems very simple to me. I have been told that it is too obvious, too much bare matter of fact, and that a philosopher, if he accepted it, would have nothing left

to do. He would lose his profession. I might answer that, if this were true, humanity might profit by the loss. But I do not believe it to be true. There is something still left for the philosopher. He can at least keep on asking questions and seeking their answers, and do this with the added consciousness of knowing what he is about. His questions may be less foolish than they were. He may find that he has to give up many cherished problems, like that of the red rose, the doubled moon, the vanished star, the bent stick, the presence of evil, the ubiquity of error, the clash of freedom and necessity, the reconciliation of mechanism and teleology, the possibility of knowledge, and the relation of soul to body, but he ought to thank God for it. He ought to be glad to be rid of appendages, sloughing them off, as nature seems to do, when they become useless or a hindrance. Even then he will have plenty to do in making confession to the world and, by his teaching, warning others from a sad employment of their time, using the history of philosophy as a text. And then, if he has sympathy, he may do some good.

These remarks are a further confession of my own thoughts. I have never been interested in the "problems" of philosophy. That is, perhaps, not strictly true. Yet I cannot remember ever having been seriously worried about them. This fact, rather than the problems, has often worried me, for it convicts me, even to myself, of a lack of sympathy and stimulates my natural egotism unduly. These problems have been very important things in history and have had serious consequences. To be cold to them is not to be wholly comfortable in the society of others or in the quiet reading in one's study. I have known souls desperate in the clutches of necessity and I have read about Erasmus and Luther. The cry for a just God in a naughty world I have heard. But it all seems to me, speaking quite frankly, unfortunate and absurd, and sometimes abominable. I know, of course, that these wofries are quite real and very important. I have had enough practical experience, enough of that sort of dealing with others which acutely exposes the conflicts which go on in men's souls, to know how real these things are, to be stirred with deep concern and to be prompted to be resolute in action.

Yet I could never translate the practical conflicts of life into problems which philosophy must solve in order that these conflicts may be reduced. This may be in me what is often called temperamental, or it may be a consequence of my father's influence on my education. He was one of the justest and fairest men I have ever known, unselfishly solicitous about others, but he never worried about the world. Its make-up and that distribution of good and evil which marks the life of man were never problems crying for a theoretical solution. He was a devout Christian and a devoted Churchman, but he never worried over any doctrine. I was early heretical and brought back Herbert Spencer from college. His serenity was undisturbed. He was serene. I can think of no better adjective. To borrow Matthew Arnold's words about Wordsworth—the cloud of mortal destiny he put by. His constant prayer was: "We know not what a day may bring forth; we only know that the hour for serving Thee is always present." We were intimate companions. And it may well be that living from childhood in the shadow of his unruffled confidence, I early grew to be indifferent to much that otherwise might have disturbed me. There have been times when the evident indifference of the order of nature to human concerns has been emotionally shocking and the sense of estrangement acute, but it is rare indeed that I have felt that such experiences implied a theoretical problem to be solved. In this sense, I was early, without knowing it, something of a pragmatist, asking myself what difference does it make to-morrow whether I am fated or free. And in my student days in Berlin, in 1893, I wrote a never-published and now-lost paper to prove that it made no difference. I wish I could read it now to see how well reminiscence is confirmed.

Yet I have been and am interested in the problems of philosophy as excursions of the human mind. The history of ideas is one of the most absorbing and fascinating subjects in which I have ever engaged. Of all the great philosophers, Leibniz is the only one I could willingly eliminate. Here I confess to a prejudice. I know its origin. When I heard Ebbinghaus lecture on Leibniz in Berlin, he remarked: "Leibniz went about introducing himself

to prominent people as a promising young man." That remark stuck. I always see Leibniz that way first and, consequently, come at his ideas with amusement. Yet, as I forget this, I can enjoy some enthusiasm in seeing how the differential calculus and the doctrine of pre-established harmony admirably work together, the monads reflecting the function of one equation, each with its own little differential. It is, generally, such congruences in ideas that I find more fascinating than any concern about their validity. Here I confess a greater debt to Ebbinghaus than amusement over Leibniz. He had the habit, every now and then, of brushing aside his notes, which followed a rather stupid method of classification, and running his fingers through his hair, exclaiming: "Aber nun, meine Herrn, wir müssen ein bischen interpretieren. Was *will* der Mensch?" Then, there was a lecture indeed. Yes; what would a man have? How does he go about having it? Whither is he led? Into the grip of what ideas does he fall? Where does he arrive, with or against his will?—like Hobbes sending Christian souls to martyrdom in a heathen state as the only allowable escape from the absolute sovereignty of a king who orders them to renounce their faith. There is an inevitability to which ideas bow. They are gotten of experience, as Locke so abundantly shows, but once gotten, they lead experience instead of following it. And that to which they lead may send them back to clarify or mock their source. It is so with the problems of philosophy. They are born of ideas which experience generates. Once born, they run their course and then come back to clear or muddy their origin. They exercise a function rather than lead to a solution. The exercise of that function seems to me to be better displayed in the thinking of the great than it is displayed in introductions to philosophy, like Paulsen's for example, where the problems are systematically detached and rendered as the outgivings of a universal experience which no man ever had. *Was der Mensch will* is then entirely forgotten, although it is always what some man would, what he would in his day and generation, moved by the forces that played upon him, which has generated these problems with vitality. Deprived of individual and social backing, they are little more than formal

exercises, good for discipline in ratiocination, but poor substitutes for the vitality of Plato or of Hume.

While I have been writing, a rather cryptic saying of Professor Garman's has been claiming attention: "A man never *thinks* wrong; his danger lies in *not* thinking." It was a perplexing utterance and mixed up, as I remember, with some Hegelianism. Errors of thought seemed to be all too frequent and familiar things to be swept aside with an aphorism. The maxim did pedagogical service in his classroom. I will not say that he made us think right, but he made us think fatally. I well remember a class-mate, one of the best students in the college, who, after a thrice-repeated perfect analysis of Hume on causation, was made to swallow the doctrine much against his will, because he found no fault with it besides his own dislike. I cannot say what "Garman's philosophy" was. He certainly left me with no system of philosophy and no consciousness of one. He did leave me with an immense respect for the thinking mind. Its wanderings and where it would go next became more alluring than stopping at some comfortable inn along the way. And I remember another class-mate, a partner of the Berlin days, who asked me what system of philosophy I had decided on to teach when I returned to America. The question struck me as preposterous. I was diffident about admitting that I had no system, but I had heard the phrase "the Odyssey of the spirit," and was more interested in what that phrase implied than in indoctrinating youth with any system, whether borrowed or egotistically thought to be original. I fear I may have changed in this respect, although I still boast of a contempt of discipleship. These things are said, however, not to praise my character but rather to illustrate my education and its bearing on my attitude toward the problems of philosophy and the history of ideas. The mind, like the body, has its excursions. The profit of them is the traveller's profit.

I have already hinted that the travelling has a consequence. With me it has become a major one. Ideas, as Locke urged, are born of experience, of the body's contact with the body's world. He thought that God could—although he believed that God did not—have made the body think without the addition of a soul to

help it. There was a beautiful courage in that honest Englishman who, like some other philosophers, came near to being a clergyman. Yet he seems to have been a little afraid of the soul, a little afraid of "ideas" and used the term abominably. They ran away with him at times, as is well illustrated in his chapter on "Solidity." In this chapter Locke makes two statements which deserve critical attention: "That which hinders the approach of two bodies when they are moved one towards another, I call solidity"; and "If anyone asks me what this solidity is, I send him to his senses to inform him." Who will forbid the sending? But who can deny that the effect of it is a definition? Solidity turns out to be more than something at the tips of our fingers; it turns out to be something characteristic of the system of things in which our fingers move. Going to the senses opens the door to definable relationships. A man thereby enters a realm of being in which ideas enlarge and fructuate and from which he may return to his senses with a different touch. He is on his way to knowledge. This is not a matter of comparing our ideas to see whether they agree or differ as one might compare a sound and a colour. It is not a matter of compounding them as one might compound the tastes of water, sugar, and lemons and get the taste of lemonade. Locke's illustration is "gold," but his examples of knowledge are pitiful. When he is through with knowledge, he throws most of it over in favour of what he calls judgment, leaving the remnant as a foretaste of future bliss. It can all be made very ridiculous. Yet he was fundamentally sound. We must go to our senses, not our souls, if we are ever to enter the realm of mind. Far less acute than Descartes and far less subtle than Hume or Kant, he was far more solid than any of them. We enter the realm of mind through our senses, but it is a realm we enter. There a different authority rules than the porter who let us in. There one travels among ideas which are forced to acknowledge a controlling fate.

And so, to continue this apology for my life, I have leaned on Locke as on a sure support. I have ridiculed before my classes what has seemed to me to be ridiculous in him, and I have forced him to exhibit the fate to which his own ideas were committed.

If, however, I am at all sane, I thank him from the bottom of my heart, I thank him for sending me to my senses to find the mind—rather than to Descartes to find it in doubt. For this "sending to the senses" when thoroughly worked out, reveals that what the senses define is not a discrete series of isolated contacts on which some synthesis must be superimposed. Locke so supposed, and his working out of the supposition amply demonstrates its futility. He was forced to define *real knowledge* as something no man could ever attain and make it, consequently, a conception of no use whatever in this mortal life. He should have paid more attention to what he had left, to those sciences he would free from the dictation of philosophers. We can never *know* whether our ideas agree with things, but we have to *proceed* as if they did! But if we cannot know the former, what possible sense is there in saying the latter? What is the sense of saying that we must proceed on the basis of something we know nothing about? What is the sense of trying to reduce knowledge to psychology, when psychology must be a branch of knowledge or not worth the paper on which it is written? Is psychology, too, the taking of ideas to agree with something without any knowledge whether they do or what that something is? Is the "science of knowledge" the same sort of thing? I must protest. The doctrine of the "association of ideas" in some form or other has remarkable vitality. The reason is, I suppose, that they *are* associated. When, however, we turn the fact of their association into an explanation of knowledge, we have to make a number of assumptions for which association cannot account. Chief of these is the great assumption which Locke himself made: that there is, to begin with, an order in things to which the mind tries to conform, sometimes succeeding, perhaps, but more often failing. This makes "the order in things" the crucial thing for the whole doctrine. If there is no such order, it is senseless to suppose that the association of ideas conforms to it or reveals it. If there is such an order, and if it is helpful to explain the association of ideas, then the association of ideas does not explain it or our knowledge of it. If we try to escape these alternatives by concluding that we have *only* an association of *ideas* to deal with,

we may, perhaps, understand what we mean by "association" in this conclusion, but we ask in vain for an answer to the question, What do "only" and "ideas" distinguish? What are "ideas" contrasted with and what does "only" exclude? The conclusion excludes an answer, and is, therefore, meaningless. It is much better to go to one's senses, to go to what even Locke too much neglected, to the enterprises in which men are engaged in discovering order and not in supposing it exists or in trying to account for its existence—to the hope of getting knowledge, not to the hopelessness of explaining it. Then order imposes itself upon us. It is found to be, not an assumption which we make, but a discovery which we welcome and fear. On it our happiness and misery depend. The better we know it, the more we can modify our destiny; and we are in its hands as in the hands of fate. We go to touch for solidity to discover it to be that which keeps bodies apart, something more than an isolated sense datum, something in an order of things.

So I once wrote an article on "Structure" and, later, the *Realm of Mind*. The principle of realism, carried out, seems to me to lead repeatedly to at least the implication of structure. I have frequently hinted at this in what I have here written. Even the attempt to write something like one's philosophical biography, calling the past to remembrance and probably distorting it for effect, involves the attempt to find a framework into which events, readings, and reflections fit and thereby own some relation to one another. Whatever our account may be of, it is an account with some order or structure that is aimed at and expected. Without it the account cannot be understood; we call it unintelligible. If it is of the world or of nature that we would give an account, the same implication holds; we must discover or invent an order or structure. We are often deceived by invented orders when they are brilliant and tightly knit. They may impose on mankind for centuries. Even when we reject them, we admire them, and we more readily believe a man who tells us lies in an orderly fashion than one who tells us the truth in disorder. The reason for this is not our credulity. Invented orders are rarely pure inventions or wholly arbitrary. I doubt if they

ever are. One lie forces a man to tell another, but this other must be a supporting lie, one which fits into a structure, the structure which the first implies, so that with the first lie a man is doomed to go on inevitably, if he goes on at all in its support. Even Fairyland and Nowhere soon rob their explorers of freedom. Premises freely or conventionally accepted lead to conclusions which their acceptance never suspected. Mathematics is the crowning example. Counting by tens is a convention, but Kant made a good deal of the fact that $7 + 5 = 12$ is not. He laboured the fact with astute phraseology which ought not, however, because of a dislike of words, to obscure the leaning of the proposition on an order and not on its subject. Mathematics *is* the crowning example, and with its many applications is powerful enough to prove that order is not a human bias or an imposition on reluctant material. It is an implication of all existence, something to be set down as metaphysical, something which we creatures of a day never made—for if we did, why do we rebel against it, cry over it, and yet seek it with our whole heart in the belief that it is the final answer to every question that we ask? It, and not our minds, is responsible for the intelligibility of the world, and we have minds because our bodies are in contact with other bodies which jointly with it are in an order enmeshed. That is why I wrote the *Realm of Mind*.

And that is why I have joined Spinoza to Locke in my affections. Few philosophers have had the sense of order as supremely as Spinoza had it. It overpowered him and set him all atremble. Ostracized by society and ill with consumption, he could rest in it as in the embrace of God's love. The beauty of it in him for a modern reader lies in his freedom from epistemology and the confusions of subjectivism. He is astonishingly free from empiricism also. This, I find, is a matter of offence with students. It is difficult to get them to put, with him, the empirical world aside or take it for granted as something acknowledged but not allowed to interfere with the fatality of thought. They expect him to show why, as a consequence of God's nature, the seasons change and the clouds drop down their dew. That he is wise about men and has a profound knowledge of human nature seems clear

from many a penetrating remark, but to affirm that whatever is—even in this matter of human nature—is in God and without God can neither be nor be conceived, is a queer sort of psychology. They often look at him as a juggler, who presents to them an apparently empty hat in the shape of definitions and axioms and then proceeds to draw out of it astonishing things. They rarely fail in the end to be impressed by an inevitability, august, sublime, and possibly tender. The empirical world is somehow caught in it and illustrates it, just as *this* circle is caught in and illustrates *the* circle. The question why, if *the* circle exists, *this* circle should also exist, remains unanswered, but it tends to become unimportant, for there seems to be some sense, even if an obscure and baffling sense, in saying that without *the* circle, *this* circle could neither be nor be conceived. Quite possibly, Spinoza, like the rest of us, was a man who thought he proved more than he did. There is abundant evidence of it; and his method of exhibiting his thoughts leaves much to be desired. He was a very interesting person and a baffling one. People found him that. They thought he had said something important which they did not understand and which seemed to violate cherished beliefs and obvious facts, and when they asked him about it, he had the habit of telling them that they did not understand, that they knew nothing of God and the human mind. A psychoanalyst can readily find in him an inferiority complex and a defensive mechanism. It may be ungrudgingly admitted that he had both, and fled to God because the world rejected him or because he was too weak to accommodate himself to the world. The fact of him, however, and what he did are more important than any analysis of his personality. The *Ethics* is a book which, like Euclid, should be read with no curiosity about its author. It is a book in which personal opinions and prejudices should not be allowed to count. They are as irrelevant to the reader as Euclid, the man, is irrelevant to the boy studying geometry. For it is a geometrical effect one comes away with. In the light of this effect, the language can be discounted. The mediaeval terminology, all the apparent jugglery with essence, existence, idea, and power, is an instrument to impress upon the reader

an overwhelming sense of the fact of order and structure. He must get *substance* before he gets anything else. He must begin philosophy with God and not with Locke. Unless he begins in this way, he can never understand anything; he may go to touch for solidity, but if he stops there he can never understand what he is saying when he says: By solidity, I mean this or that. For knowledge is not eating and we cannot be expected to devour what we mean.

And so I lean on Spinoza as well as on Locke. To touch the world or experience it is very far from knowing it. Experience and knowledge seem to me to be very different things. I quote Santayana again, from memory: "I have often wondered at those philosophers who have said that all our ideas are derived from experience. They could never have been poets and must have forgotten that they were ever children; for the great problem of education is how to get experience out of ideas." It is the great problem of life and science: how to fit oneself into an order, how to get out of the idea of Relativity white marks on a photographic plate. Doing these things is knowledge. Bumping one's head against a wall is experience and a poor substitute. There is joy in going to the senses—to experience—if one does not stay there. They open the door to the realm of mind, to order, to structure, to the inevitable, to freedom, to substance, to God—if God is that in view of which our destinies are shaped.

It is with one of those unreasonable enthusiasms which we often have that I turn to Aristotle. He has said everything that I have ever said or shall ever say. He tells me that that is continuous which, when cut, has common boundaries, and I find it unnecessary to go to Dedekind. This is quite stupid, I know, but I may as well confess it. He tells me that A is the cause of B, and B the cause of C, and so on for ever, but that B is not the cause of C because A is the cause of B; and the weight of an infinite series is lifted from my mind for ever. Everything begins when it does, and there is no need to search the past for a first cause or origin of things. Existence begins now fully as much as it ever began. A road begins at this end, but it also begins at the other end, even if it began at this end before it began at the

other; for nothing ever begins before or after it does begin. I admire this cool insistence on such simple and obvious things—taking the beginning of a road as a first illustration of "principle" and then going to the keel of a ship, the axioms of geometry and the rules of a city. The principle of a thing is found where the thing begins, and we must never forget that in searching for principles. The tenses of the verb are the carriers of time. One thing may begin before or after another or may so have begun. Things may be and are arranged that way. But to arrange principles themselves in temporal order is to forget that we are always dealing with a dynamic world. Form, matter, efficacy, and end (purpose) are just as much now as they have ever been, but this particular case of them—this man, this house, this stone—never was or is, or will be again. It is this particular case which is interesting and important and the object of our questions. What is it? Out of what did it come? What effected its coming out? What purpose does it serve? A complete answer to these questions would tell us everything about the case. It would help us to the formulation of conditions which are "catholic," which hold good "on the whole" or for the most part; and so help us to arrange our knowledge in bodies of knowledge appropriate to this or that particular subject-matter. While we must always remember that we are dealing with a dynamic world and recognize that it is only some particular, individual case, not something in general, that raises the question of the "four causes," we may address ourselves to this very fact and discover that particular field of inquiry which was later called metaphysics. What we must remember and recognize and what questions we ask when dealing with a stone or a house or a man, ought to give some indication of what it is *to be*, whether it is a stone, a house, or a man—or even a god—that *is*. The implications of being something are the implications of being anything, if "things will not be governed ill"—*τά δε ὄντα οὐ βούλεται πολιτεύεσθαι κακῶς*.

I owe to Aristotle my conception of metaphysics and the love of it. His errors and omissions—I can point them out as con-

fidently as the next man. I know how history has distorted him and what a tyrant he became over the minds of men. That was because few really read and studied him, or because they read and studied him with a mental set previously determined by their own language and ideas. I had to tell a very brilliant student once that the word "cause" never occurs in Aristotle, before I could make him see that his contention that Aristotle was not justified in the use of the term was amusing rather than critical. Students who go to his text often forget that his writings are not translations of English. Even so, he has a gripping power and, when read attentively, is still the great intellectual force he has always been. Compared with that, his errors, omissions, and tyranny are now trivial. From him I learned that metaphysics is a special interest and not a super-science which should dictate to others and criticize them. They can get on without it, although it cannot get on very well without them. Yet it admits no servile dependence. It does not wait on their permission or advice any more than they wait upon its. It would share with them mutually in the interests of the mind. But it frequently has to protest against the substitution of them in its place. It dares to be as egotistical as they are and be thankful. If Aristotle could try to keep them all together in happy companionship, why not keep on trying? For metaphysics would never aim at usurping their place. It would not boast, even if it boasted perfection, that it could solve a single problem in physics, chemistry, or biology, and it would not expect them to do its own work of analysis. Yet it would claim to be a very human enterprise without which a man may be easily intellectually warped and deficient in sympathy with the great episodes of human life. Aristotle, with all his errors, is immune to that.

And, more technically, I have learned from him that metaphysics is analytic. It produces nothing out of a juggler's hat, and certainly not God and the world. It takes things as they are, in all their obvious plurality, and never supposes that they can be reduced to ultimates from which they sprang by miracle or evolution. It leaves the history of existence to historians and its evolution to evolutionists. Its interest is in what it is to be a

history and what it is to be an evolution. That there are space and time, and matter and energy, and life and death and thought —a world to know and minds to know it—it admits beyond question. Faced with these things, it has no interest in why they are as they are—why the body has a mind or the mind a body. It does not try to justify the ways of God or matter. Since nature produces many things, it is content to take her productivity as a fact without asking for a reason for it, knowing that the only possible reason would be "something that produces." But metaphysics would analyse productivity to see what it implies, without supposing that the results of its analysis disclose factors which once, in some far-away time, conspired together to make a world.

One further debt I must acknowledge to Aristotle—an appreciation of language which I never had until I studied him. I was early impressed with his use of the verb "to say" and his insistence that truth is not a matter of things but of propositions. Knowledge, with him, is largely a matter of *saying* what things are. This gives a dominant *logical* note to all his writings, noticeable even in his descriptions and illustrations. It would seem, at times, as if a coherent system of sayings in a given field was of more importance to him than its subject-matter. He points out how certain common uses and turns of speech vary as they are used in varying connections. τὸ ὄν λέγεται πολλαχῶς. The principle is generalized almost to the roots of being. What is said is relevant to the occasions of saying it, so that the same expression may exercise quite different functions in different connections. He made common words and phrases do unexpected service. He made, one might say, the Greek language conscious of itself as an instrument rather than as a language different from that of barbarians. And although truth is not a matter of nature, the *saying* of things is. When Socrates is said to be a man, something has happened to him of which he may be unaware, but he has provoked conversation fully as much as he provoked the resentment of Athens. Existence is provocative. Its being so is one instance of its kinetic character, for speech is a motion fully as much as the movements of the spheres. What a saying effects

is consequently more important than the way of saying it, although a scrupulous nicety about expression is to be commended highly. From all this I hope I have learned a respect for language and been made aware that alarmingly different expressions in the same language and in different languages may convey the same idea. I have often told my classes that when Jonathan Edwards called his sweetheart "a handmaid of the Lord" he was not very far removed from the modern youth, who might call his "a damn fine girl." The different expressions connote a different culture and different proprieties, but should a metaphysician quarrel with either of them? The maid was provocative. I should not be surprised, therefore, if I found out that Thomas Aquinas and Immanuel Kant were saying the same thing; or John Calvin and Charles Darwin—the many are called and the few chosen. It is again "Was *will* der Mensch"; and, perhaps, when a man thinks, he does not think wrong. The language he speaks may be unintelligible or sound absurd, but there is at least the suspicion that it is humanly vernacular. We all live in the same world of sunrise and sunset, but talk about it in languages which are diverse; and what our differing utterances are relevant to is more important than their relevances to one another. Since they are relevant to something, I have been led to consider language as an instance of that give and take in nature which discovers ideas.

And so I end, conscious that I have left unsaid things that might have been said and not as sure as I should like to be that I have fulfilled the purpose of this volume. I have taken the opportunity to be one which permits and encourages a freedom of expression and intimacy which one ordinarily might prefer to avoid. Confession is said to be good for the soul. I think I have had some good of it. Receivers of confessions—one leaves the priest a little worried about what has been told. I think of David Hume: "I cannot say there is no vanity in making this funeral oration of myself, but I hope it is not a misplaced one; and this is a matter of fact which is easily clensed and ascertained."

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